BOROUGH OF PRESTON.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

URBAN AND PORT SANITARY AUTHORITIES,

FOR THE

Year ending December 31st, 1913.

H. O. PILKINGTON,
Medical Officer of Health,
Medical Officer to the Port Sanitary Authority,
Medical Superintendent Isolation Hospital.

F. Seed & Sons, Printers, Guildhall Street, Preston.

BOROUGH OF PRESTON.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

URBAN AND PORT SANITARY AUTHORITIES,

FOR THE

Year ending December 31st, 1913.

H. O. PILKINGTON,

MEDICAL OFFICER OF HEALTH,

MEDICAL OFFICER TO THE PORT SANITARY AUTHORITY,

MEDICAL SUPERINTENDENT ISOLATION HOSPITAL.

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b29998141

Report of the Medical Officer of Health.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

In the following Report—that for the year 1913—the mortality and birth rates, and other vital statistics for the Borough, are calculated upon a population estimated at 118,070, an increase of 440 having been allowed for the growth amongst residents during the previous year of 1912.

This increase is less than one-half of the natural increase which had taken place during that period, the births having exceeded the deaths by 993, so that it must be supposed that 553 more persons left the town than came into it.

The addition made each year to the population is based upon the increase which had occurred between the two previous census periods, and the return made at the last enumeration in 1911 was disappointing, inasmuch as it brought the population to a lower figure than the number of persons supposed to be living in the town some ten years previously. And it must again be explained that any difference found to be existing in the various tables is due to the fact that in Tables Nos. 1a, 3a and 4a the births and deaths occurring in the Fulwood Workhouse are taken into account, whereas in the others attention is only given to such as have actually occurred within the Borough boundaries. In its growth, development, and importance, the town has always been severely handicapped by the non-inclusion within its limits of the surrounding townships and districts, although these —as in the case of Fulwood—are actually a continuation of the town, or—as in the case of Penwortham—although separated by the river, are largely occupied by persons whose daily business life is spent within the town. For many years neighbouring towns in Lancashire have been extending their boundaries, and absorbing within their limits important townships and districts, with the result that they have gained in size, in population, and in commercial importance. In this respect Preston has stood still, and has seen towns, formerly her equals in population, now rapidly going ahead, whilst others, classed as of secondary importance, are gaining ground, and threaten in the near future to equal, if not actually to surpass her.

Questions of distance have, to a great extent, been solved by increased facilities for transit, and apart from commercial interests, it must surely be to the advantage of a town to include within itself healthy suburbs, populated to a great extent by a young, healthy, and prosperous community.

Although no case of Small Pox was at any time brought under observation, cases appeared from time to time in various parts of the country ; in some instances the locality being sufficiently near to cause apprehension as to the possible introduction of the disease through the medium of some infected person or thing. The danger from an unvaccinated community is one which must increase year by year, since the proportion of unprotected persons increases with every child for which exemption is obtained. Should the infection gain a footing in the town, two immediate results may be expected—first, a rapid spread amongst the unvaccinated, and second, a demand for vaccination, which it may then be difficult to supply. Since, owing to the neglect of vaccination, the conditions favourable to the spread of Small Pox are each year increasing, it becomes more than ever necessary that accommodation should be provided for the prompt removal, and isolation in hospital, of any case which may occur. The value of such removal is often in direct proportion to the speed with which it can be carried out.

The present Hospital, erected as a temporary building in Moor Park, in 1888, and afterwards taken down and stored, and then re-erected in its present position in Holme Slack, is now time-worn and dilapidated. A portion blown down in the great storm of 1903, and shortly afterwards re-built, might still furnish accommodation for some twelve or fourteen patients, but the kitchen and administrative departments are, like the rest of the building, worn out and useless. It is, therefore, necessary for the safety of the town that a new Hospital should be provided, and its position, nature, and extent are matters at present receiving the attention of your Committee. Such a Hospital may for a long time remain untenanted, but its utility depends upon its being ready to receive, and deal with, the first cases of an outbreak, which otherwise might take on an epidemic form.

Measles were prevalent at the commencement of the year, as many as 83 deaths having been registered from this cause during the months of November and December, 1912. Every effort was made to prevent the spread of the disease, children exposed to infection being excluded from school, whilst the schools themselves were from time to time thoroughly disinfected. As a result of these and other precautions, the number of cases began to diminish towards the end of March, and though deaths continued to be reported as late as the beginning of June, the epidemic was then practically over. The difficulties connected with the prevention of these outbreaks, and their treatment when once established, have been frequently dealt with in these, and similar, Reports, and are now pretty well understood by parents and others having the care and control of young children, but, unfortunately, there still seems to be little inclination to carry out the instructions which, in various forms, have been so frequently and so earnestly given. The difficulty appears to be that of getting the general public to understand the dangerous nature of the disease, especially amongst very young children, and to appreciate the fact that it is the cause, direct or indirect, of more deaths than all the other combined forms of infectious disease.

The actual number of deaths attributed to Measles during the past year was 65, or at the rate of 0.58 per thousand of the population—a figure only exceeded amongst the large towns by St. Helens, Wolverhampton, and Sheffield.

Scarlet Fever was a legacy left over from the previous year, and continued present throughout the whole of the twelve months, and in all parts of the town. As many as 768 notifications were received relating to this disease, the deaths—29 in number—showing a case-mortality of 3.80 per cent. These figures show that the general character of the illness was mild, although there were one or two occasions during the year when cases appeared presenting more severe symptoms, and giving indications of septic mischief. The conditions met with in former epidemics were again experienced, and a constant watchfulness had to be maintained in order to ensure that a certain amount of isolation was kept up in the case of those patients who—not having been removed to hospital—were nursed at home. But the more troublesome cases were those in which medical assistance was not called in until the appearance of desquamation—possibly attended with urgent symptoms—rendered this necessary. Enquiry would then show that the patient, some two or three weeks previously, had suffered from a feverish attack, with sore throat, and possibly a slight rash, but beyond his being kept indoors for a few days nothing further had then been done. The fact that Scarlet Fever is, and for some considerable time has been, prevalent in the town—as notified by reports and wall posters—should have been sufficient to arouse the suspicions of the parents, and very likely may have done so, but in such cases it is difficult to prove sufficient knowledge on their part as to the true nature of the illness, to justify a prosecution for wilful exposure of an infected person to the danger of the public health.

And yet in the interval between the first illness and the appearance of desquamation or other sequelæ, the patient has been allowed to run about, attend school, visit picture shows, and freely intermingle with other children, with the result that a certain number of cases appear which can, with more or less certainty, be traced to this source, although it is impossible to ascertain the true extent of the mischief thus caused.

Scarlet Fever is a tedious disease, because the period during which the patient continues to be infective is a long one, but both on account of his own health,and for the safety of others, it is necessary that this period should be strictly observed. A slight, but neglected, case of Scarlet Fever may be followed by after effects, which influence the whole of the patient's life, rendering him, if not a chronic invalid, one susceptible to attacks of illness, and not improbably shortening his term of existence.

A little more thought and consideration on the part of many parents for the safety both of their own children, and those of their neighbours, would have the effect of preventing a great deal of this kind of illness, and would certainly assist the Health Authority in its efforts to stamp out such an epidemic as that from which the town is at present still suffering.

The deaths from Scarlet Fever, as already stated, numbered 29, and the mortality rate—0.28 per thousand—was the highest of the 39 large towns, a condition not due to any unusual severity in the character of the disease, but rather to the fact that it continued present during the whole of the twelve months.

In order that public attention might be drawn to the manner in which the infection is so often spread, and to the penalties to which those persons render themselves liable who either wilfully or through carelessness assist in such spread, the following poster was affixed throughout the town, not only upon the regular hoardings, but also near the Churches, Mills, and Schools, and indeed in all places where it would be likely to attract attention, and so effect the purpose for which it was intended:—

SCARLET FEVER.

> Scarlet Fever has for some time past been prevalent in the town, the infection in many instances having been spread by children who have suffered from very mild attacks, or in whose case the true nature of the illness has not been recognised. Such children have been allowed, whilst still in an infective state, to attend School, play about in the Streets, and associate with other children.
>
> The result has frequently been injury to their own health, through catching cold, etc., and the spread of the disease to others.
>
> Parents are advised in suspicious cases—where there is a slight rash, sore throat, etc., to obtain Medical assistance, and are warned that if they wilfully expose a patient in any street, public place, shop, etc., they are liable to a Penalty not exceeding Five Pounds.
>
> H. O. PILKINGTON, MEDICAL OFFICER OF HEALTH,
> PRESTON CORPORATION.

The amount of Typhoid Fever continued to be satisfactorily low, the number of cases reported during the year having been 47, of which 10 terminated fatally. These figures compare favourably with those of recent years,and the improvement becomes much more evident, if comparison be made over a more extended period. In the early stages, the diagnosis of Typhoid Fever is often exceedingly difficult, and the above figures might be considerably reduced, if certain cases were excluded, which, while presenting many of the appearances of Typhoid Fever, were either due to other causes, or to some condition—possibly in combination with Typhoid Fever—which overshadowed the latter disease, and proved fatal before it had become thoroughly established. Further reference will be made to such cases later on, when dealing with the figures connected with the Isolation Hospital.

Although Whooping Cough is so closely connected with, and so frequently follows upon, an outbreak of Measles, the amount observed during the past year was not large, and only 5 deaths resulted from this cause, all occurring in young children under the age of 2 years.

As regards this disease, a comparison with the 39 largest towns shows that 32 of them in this respect show a higher rate of mortality.

In several recent Reports reference has been made to the increased amount of Diphtheria, which of late years has been observable in the town. The number of cases reported during the past year was 277, of which 31 proved fatal, the deaths standing in the proportion of 11.20 per cent. to the cases of sickness. This is a lower case mortality than that of the previous year, when the notified cases were 238 and the deaths 39, and would seem to indicate a milder form of disease. All parts of the town were affected, and the disease was by no means confined to the worst or most closely inhabited districts. Ashton Ward, with 7 deaths, showing the greatest amount of mortality.

The provision of anti-diphtheritic serum, which is gratuitously supplied to medical practitioners upon application at the Isolation Hospital, had an undoubted effect in keeping down the death-rate, since its beneficial influence upon the disease has now been thoroughly established, its good effect being in proportion to the early stage in which it is used.

For this reason it is advisable that it should be employed even in cases where there is some doubt as to the true nature of the illness, and where a bacteriological examination may subsequently show an absence of the true diphtheritic bacillus.

An examination of the house was made in all cases of Diphtheria, and in some instances defects were found about the water closet, or in connection with the system of house drainage. It seems probable that the absence of sunlight has some effect in the causation of Diphtheria, and the disease is not unfrequently connected with unpaved streets, which, in wet weather, have a surface of mud, interspersed with shallow pools of dirty water. These and the opening up of made ground,—i.e., ground formed in previous years by the tipping of refuse matters—are conditions which certainly tend to cause swollen, relaxed, and ulcerated throats, and so may pave the way for the more serious form of illness.

The deaths from Diarrhœa amounted to 92, a number considerably higher than that recorded from the same cause in the previous year, and to a less extent higher than the average for the past six years. All the deaths occurred under the age of five years, 71 being those of infants under the age of twelve months, 19 those of somewhat older children, between the ages of one and two years, leaving only two who had exceeded the last-named age period. Most of the deaths were recorded during the months of September and October, not the period of greatest heat, but that in which flies enter the houses, and in which changes of fermentation and putrefaction are followed by the worst results. The time of the greatest mortality was the last two weeks of September and the first fortnight of October, when 41 deaths were recorded, of which 32 occurred under the age of 12 months. Most of the fatal cases throughout the year were registered in the oldest and most crowded parts of the town, the districts of St. John's, Park, and Trinity Wards contributing one-half of the total mortality. It is, of course, in localities like these that the greatest difficulty is experienced in keeping the milk in a clean, cool, and wholesome condition, since, however good it may have been upon delivery, in such houses it rapidly deteriorates, and in a short time, during the hot weather, becomes practically unfit for consumption. It is at such times, and under conditions like these, that dried milk may with advantage be used. It is sterilized during the process of manufacture, and its dried form and smaller bulk enable it more easily to be kept free from outside contamination. The best food for infants, undoubtedly, is good fresh milk in its natural condition, and it is only under circumstances such as those indicated that any other form can be recommended. The subject of Infantile Diarrhœa is, of course, closely connected with the work of the Health Visitors, and will again be alluded to when dealing with their record for the year.

Although the deaths from Consumption—108—were somewhat higher than the number recorded from the same cause during the previous year, they were below that for 1911, and were about equal to the average of the past five years.

Under the Public Health (Tuberculosis) Regulations, 1911, which placed Tuberculosis on the list of Infectious Diseases requiring notification, certificates were received of Pulmonary Tuberculosis, or Consumption, to the number of 222, but from time to time deaths were registered from this cause, concerning which no previous certificate had been received.

Under the recent Insurance Act, public attention has been especially directed to this form of disease, and during the year the local Sanatorium Sub-Committee was instrumental in sending some 32 patients for treatment in institutions with which arrangements had been made for the retention of a certain number of beds for the use of the town. The following Table gives a summary of the number of patients—male and female—who received this treatment, and its results :

	MEN.	WOMEN.	TOTAL.
Number of Patients admitted	17	15	32
Discharged and declared fit for work	11	5	16
Improved	2	2	4
No improvement	1	3	4
Remaining under treatment at end of year	3	5	8

But here, as elsewhere, the supply of beds obtainable in this way is inadequate to meet the requirements of all those who would be likely to receive benefit from this form of treatment. During the year the question as to the establishment of a Tuberculosis Dispensary and the appointment of a Medical Officer engaged the attention of an Advisory Committee, consisting of members from the Local Insurance Committee and the Health Authority, as did also that of the provision of Sanatorium and Hospital accommodation for the treatment of patients in the early, and the advanced, stages of the disease.

Although nothing definite was accomplished before the close of the year, it is satisfactory to be able to state that, at the present time of writing, a Medical Officer has been appointed, under whose direction the work of a Dispensary—situated in a suitable and convenient locality, and properly furnished and equipped for its intended purpose—is being carried on. The provision of a Sanatorium and Hospital has also been under consideration, the reason for any delay in this respect being the difficulty experienced in obtaining a site which shall be quite suitable for the intended purpose, while at the same time it shall not entail a too exorbitant outlay.

Much money has, therefore, already been spent in the campaign against Consumption, and still greater expenditure looms in the future. That much good will result there can be little doubt, and it is to be hoped that it will in some sort be in proportion to the outlay. But to ensure anything like success there must be close attention to general sanitation and the simple laws of health, together with the earnest co-operation of the patient, his family, and friends. A patient, who has received the advantage of treatment in a Sanatorium, may leave the institution in good health and apparently cured, but if he fails to profit by the education he has there received, and upon his return home relapses into insanitary habits and surroundings, his powers of resistance will again become lowered, and the germs of disease, scotched but not killed, will resume their former activity. No plan of treatment will be effective, unless the patient spends his hours of employment, of leisure, and of sleep in a good atmosphere with sufficient ventilation, and unless he avoids lowering his general health by any form of intemperance or excess.

The improvements which, in recent years, have been carried out in the workshops, factories, and homes of the working classes have already done much to reduce the amount of sickness, and the consequent mortality, from Phthisis, but these measures will still have to be continued, in order that to everyone may be afforded the possibility of spending his life under healthy conditions.

The deaths from Diseases of the Lungs, included under the headings, Bronchitis and Pneumonia, were rather in excess of the number for the past few years, the first-named disease contributing 236, and the second 119 deaths, to form a combined mortality of 355 for the year. These are diseases influenced to a large extent by conditions of climate and temperature, and it was towards the end of February, and during the months of March and April, when the weather was treacherous, and cold winds prevalent, that the greatest amount of sickness was observed, and the consequent rate of mortality was highest.

As usual, the majority of the deaths were registered amongst infants and old people, those who are least able to withstand severe cold or sudden changes of temperature. In proof of this, during the two weeks ending February 15th and March 1st, the Infantile Mortality rose as high as 325 and 300 to each thousand births.

The deaths amongst infants and very young children, grouped, in the weekly mortality returns, under the heading, Teething, Premature Births, and Debility, amount to 328,—a number higher than that for the previous year, but very similar to the average for each of the past six years. These are deaths which, year by year, help, and help largely, to swell the records of mortality, and further particulars as to the exact cause of each death, and the age at which it occurred, are shown in Table No. IVa.

Many of these infants were either prematurely born, or from other reasons came into the world so deficient in vitality as only to survive their birth by a few hours or even minutes.

No doubt in some cases the too prolonged continuance at work on the part of the expectant mother, or her too early return to her employment after parturition, has had an evil influence upon the mortality from these causes, the first resulting in the child being born either prematurely or in a feeble condition, whilst the second deprives it of a mother's care and attention at the very time when these are most required and most essential to its future well-being. But it is not unreasonable to suppose that the measures—the unnatural measures—which are now not seldom used for the prevention of pregnancy and the limitation of families have also an evil influence in this direction, resulting either in prematurity or excessive debility at the time of birth.

The deaths occurring at the other extremity of existence, those attributed to old age, numbered 118, very much in accordance with the average of past years. Under this heading are registered those deaths which are not brought about by any actual disease, but are the result of a gradual failure and loss of vitality of the various organs, and the great difference in the time of life at which these deaths are registered show that it is not by years alone that a man's actual age must be reckoned.

The deaths from violence, etc., as meaning Suicide and the various forms of Accident, amounted to 56, a number which again is very similar to that from the same causes in previous years.

The deaths from causes other than those which have already been dealt with number 670, and are grouped together under the comprehensive heading of "Other Diseases." Table IIIA., which deals with the entire mortality for the year, gives further particulars as to the deaths from these other diseases, and from this it will be seen that 25 were due to Influenza, 109 to Cancer, as meaning some form of malignant disease, 171 to affections of the Heart, and 53 to Nephritis or disease of the Kidneys.

In former Reports I have noted the fact that no special record is made of deaths from Cerebral Hœmorrhage, so often associated with Arterio-Sclerosis, or a hardened condition of the arteries. This is a disease of the old, or at any rate is seldom met with under the middle period of life, but the saying that "a man is as old as his arteries" is a true one, and there is reason to believe that the stress and speed of modern existence has had the effect of increasing this form of disease, and its consequent mortality.

This completes the list of mortality from all causes, and at all ages within the Borough, and during the past year, a year which, in order that it may be in accordance with the Registrar General's returns, consists of 53 weeks, extending from Dec. 29th, 1913, to Jan. 3rd, 1914.

The number of deaths—1,871—is equal to a rate of 15.55 per thousand, based upon a population estimated at 118,070 for the period in question. This is somewhat below the average—16.11—for the ten years immediately preceding, the period during which the rate of mortality has so much improved.

The number of registered births was 2,864, equivalent to a rate of 23.80, exceeding the deaths by 993, a number representing the natural increase for the twelve months. The rate in question is very slightly higher than that recorded during each of the previous three years, but these four years may be grouped together as showing the lowest birth rates for any period for which records are available.

This reduction in the birth rate, and consequent reduction in the natural increase of population, is a matter of the gravest importance, especially when it is found that a similar condition of things exists throughout the whole country, the rate for England and Wales being much the same as with us, while in several of the large towns the returns are even less satisfactory. Such a matter is surely worthy of strict and earnest investigation, if only to ascertain the causes which are at work in bringing about so deplorable a result, and one which cannot but be regarded as of national importance.

The success—and indeed the safety—of a nation cannot depend so much upon its wealth as upon the production of children capable in manhood not only of protecting it at home, but of upholding its power and dignity in distant lands, so many of which form an actual part of this mighty Empire.

The routine work for the year is set forth in Table No. 9, which summarises, under various headings, the labours of the Sanitary Inspectors in their several districts. This, of course, gives a general idea of the work accomplished, but there must be a great difference amongst the various items, both as regards the importance of the work undertaken, and the value of the results attained.

There are certain places like the Common Lodging-houses, Cowsheds, and Milk-shops, Markets and Slaughter-houses, and premises upon which offensive trades are carried on, which require frequent, possibly daily, inspection, in order that they may be kept up to the requisite state of cleanliness, and may comply with the regulations under which they have been licensed.

But the defective condition of a water-closet, or drain connected with a dwelling-house, whether discovered in the ordinary course of inspection, or brought to official notice by a complaint from the householder or some other person affected, may be a matter which can at once be set right, or one involving a considerable expenditure of time and labour, the latter being especially the case where there are divided interests, requiring a knowledge of the various owners, and an apportionment of the cost after the necessary work has been completed. In addition to the ordinary inspection of dwelling-houses, a considerable number of visits were paid to those houses in which some form of infectious disease was reported to be present. An examination was made to see if there was any condition of the house or premises likely to have had an influence in causing the disease, and upon the patient's removal to hospital or the termination of the illness, disinfection was carried out. In certain cases of Scarlet Fever, where the patient was nursed at home, frequent visits were necessary, in order to see that some honest attempt at isolation was practised; but the difficulties attendant upon such cases have already been referred to in dealing with this disease. The removal of the majority of the patients, who enter the Isolation Hospital for treatment, is a work requiring the assistance and supervision of the Sanitary Inspectors, and this is a work which may require their services at any time, often without much notice, and not seldom at times outside the recognised hours of duty.

During the year inspections were made of 597 houses, under the Housing and Town Planning Act, and defects of various kinds were found, many of a minor character, but all upon notice, or verbal representation to the owner, were remedied; nor was there any instance in which it was necessary to apply for a Closing Order.

The housing accommodation for the working classes in this town is good, There are no tenement houses, and cases of overcrowding are not often met with. Such as do occur are not seldom the result of a family sufficiently large to occupy the whole accommodation having taken in some relative as a lodger. In these cases the desired result is generally obtained by removal to a larger house.

Owing to increased cost of erection, etc., there has latterly been a reduction in the number of new houses, and as a consequence there has been no lack of applicants for tenancy of these immediately upon—or even before—completion.

The Canal Boats trading with this town have been regularly examined, and the following Report, descriptive of their number and general condition, has, in due course, been forwarded to the Local Government Board:—

COUNTY BOROUGH OF PRESTON.

CANAL BOAT ACTS, 1877 AND 1884.

The following Report deals with the condition of the Canal Boats coming under the jurisdiction of this Sanitary Authority for the year ending December 31st, 1913.

Again no change has taken place during the past year in regard to these boats, 33 still remaining on the Register, 22 having been cancelled, thus shewing that a total of 55 has been registered.

All but two of the boats have been inspected, as have also others registered at Lancaster.

The two in question are stationed at their owner's place of business outside the Borough Boundary.

Three cases of infringement of the Regulations were found, consisting of a defective deck, and cabin requiring painting on the Express No. 7, for which statutory notices were served. Defective deck and cabin floors on the Herbert No. 34, and the cabin requiring painting on the Bee Hive No. 37.

All of these defects have been remedied.

As a rule, upon inspection the boats are found to be in a satisfactory condition, and there is a general willingness to remedy any slight defects at the verbal request of the Inspector.

No cases of Infectious Disease have been found upon the boats, nor have any such cases been notified as occurring amongst the occupants.

Two boats, the Belle No. 3, and Kate No. 24, have been laid up during the whole of the year.

The work of supervision has been carried out as in the past seven years, by Inspector Crossthwaite, in addition to his other Sanitary duties, no special remuneration being provided for this portion of his work. The following table shows the details of occupation and inspection during the past ten years :—

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
No. of Inspections	105	113	111	132	129	138	123	123	108	115
Males in Occupation ...	140	142	146	169	162	167	150	162	133	138
Females in occupation .	64	71	59	67	78	82	81	73	60	65
Children in occupation..	53	68	33	46	79	87	81	75	50	44

All the other details are shewn on the attached Statistical Supplement.

H. O. Pilkington,
Medical Officer of Health.

The Caravans and tents of the various show-people who visit the town at Christmas and Whitsuntide, or who pass through during the early summer on their way to the various Fairs and Wakes, were carefully inspected, since this is one of the means by which infectious disease is conveyed from one town to another. With the exception of one case of Erysipelas, nothing of this kind was found. Like the cabins of the Canal Boats, the living vans of the gipsies, and showmen are usually kept in an exceedingly neat and clean condition, but there is often a difficulty as to the provision of sanitary accommodation, and the removal of the household refuse. It is, therefore, necessary to see that suitable and sufficient arrangements are made, and that these are properly carried out.

The Cowsheds, Dairies, and Milkshops situated within the town have received constant attention, and every opportunity has been taken to secure necessary alterations and improvements.

As a rule, the milk is of good quality—in some instances very rich in butter-fat—but both here and in the surrounding country districts there is room for greater cleanliness in the process of milking, and in the subsequent handling and distribution of the milk itself.

There has been frequent periodical inspection of the Public Abattoir at the Cattle Market, of such private slaughter-houses as remain in use in the town, and of the Cattle Market, where large numbers of animals come for sale as well as slaughter.

The system, instituted many years since, by which the butchers submit for examination all carcases of doubtful character continues to work satisfactorily. It must, however, be understood that early notice must be given of such a carcase, that all parts of the animal—including the offal—must be tendered for examination, and that the decision of the Health Officers must be final.

Where no notice has been given, the butcher in whose possession an animal, or part of an animal, is found, which, from disease or other causes, is unfit for human food, will be liable to prosecution.

During the past year meat to the amount of 103,320 lbs. was condemned and destroyed, the whole of this having been voluntarily notified and submitted, so that in no instance was there a necessity for legal proceedings.

In addition to the Public Abattoir, the Slaughter Houses, and the Butchers' Shops generally, the Markets for the sale of butter, eggs, fruit, vegetables, etc., were constantly and carefully watched, and with the consent of the owners, fruit and vegetables to the amount of 1,482 lbs. were at various times removed and destroyed.

The Wholesale Fish Market, held at the Railway Station, requires the attendance of an Inspector at an early hour of the morning, and under his direction, fish—wet, dry, and shell—to the weight of 8,920 lbs., was sorted out as unfit for human consumption, and subsequently destroyed.

The work, which has been done under the Factory and Workshop Act, is set forth on Table No. 10, with which should also be read Table No. 5A, whilst Table No. 11 gives a list of the various Factories, Workshops, and Offensive Trades upon the Register. Just as improvements have been effected in the homes and surroundings of the working classes, so a much better and more healthy condition prevails in the various Factories and Workshops in which the hours of labour are spent. Nothing could illustrate this better than a comparison between the sanitary accommodation, which formerly existed in the cotton mills of the town, and that which is provided at the present time. In the case of new mills recently erected, or old ones which have undergone alterations and extensions, every care is taken to see that the closet accommodation is suitably situated, sanitary in character, and sufficiently large to meet the requirements of the persons employed.

Home labour is also carried on under better conditions, and since much of this consists of millinery work, and the making of wearing apparel, it will be understood that the improved condition re-acts for good not only upon the worker, but also upon those who have to wear and use the articles made.

The prevention of nuisances caused by the emission of black smoke is a difficult matter in all manufacturing towns, and the older the town, the more difficult does the problem become, since in consequence of additions and alterations, some of the older mills and workshops have not the boiler-room necessary to prevent, at all times, the outpouring of dense black smoke.

The smaller Workshops and Public House Breweries at times turn out considerable quantities of smoke ; it may only be for a short period, but the chimneys, as a rule, are low, and do not admit of being raised, and the smoke, unable to get away, makes itself unpleasantly felt in the immediate neighbourhood.

In dealing with black smoke, the course of procedure is as follows. Where the observation shows an emission of more than 10 minutes in the hour a copy is sent to the owner of the works, and a further observation is taken. Should this also show an excess, a notice is served, and if the niusance is then not abated, legal proceedings are instituted.

During the past year, 395 observations were taken, but in no case was it necessary to institute a prosecution.

A combination of ample boiler room, careful and regular firing, good coal, and sufficient height of chimney would probably represent the most efficient means for the prevention of the smoke nuisance.

Table No. 12 gives a summary of the work done during the year by the four Health Visitors in their respective districts. Their first, and perhaps most important, duty is that of visiting the births, as soon as possible after notification has been received.

The number of births actually registered during the year was 2,864, and of this number 2,813 were duly notified to the Health Office, the discrepancy between these figures being mainly due to the fact that, while notification must take place within 36 hours after birth, registration may be delayed for a period of six weeks. Consequently, at the end of each twelve months a certain number of births may be notified, the registration of which will be delayed until the following year, while in the same way, at the beginning of the year, births will for some weeks be registered, the notifications of which had already been received, and included in the returns for the previous twelve months.

Of the 2,813 births which were notified, 2,785 were at once visited, the difference —28—representing a few cases, in which there was either a request that no visit should be made, or else in which the circumstances of the case evidently rendered the assistance of the Health Visitor unnecessary. The Notification Act has now become generally known, and, as a rule, is promptly and willingly carried out. Where from ignorance or other cause there is any delay, a reminding letter is forwarded from this Office, or else if registration takes place soon after birth, the Registrar may himself give the necessary reminder. In only one instance was there anything like a persistent attempt to set the law at defiance, and here—since a number of reminders produced no effect—I applied for, and obtained, an order to take the necessary proceedings. These were, however, subsequently withdrawn, upon the parent attending and expressing regret for his non-compliance, and for the trouble which had thus been occasioned. Undoubtedly one thing leading to early and willing notification is the fact that the assistance given by the Health Visitor is becoming more and more appreciated, and instead of being looked upon with suspicion, her visits, amongst the working classes, are now welcomed. The result of these visits, made to recent births, was to show that no less than 2,554 of the newly-born children were breastfed, but after a few weeks this number, for various reasons, rapidly diminishes, and artificial feeding—partial or complete—takes the place of the mother's breast milk. This is further shown in the visits paid to the Diarrhœal deaths amongst infants—these generally occurring about the third to the sixth month—when the cases of breast feeding are seen to have fallen to less than one-half of the number of those in which some form of artificial feeding has now been substituted.

This fact explains the cause of many of these deaths from Infantile Diarrhœa, since at the age period mentioned children are not able to digest the starchy matters which form the bulk of artificial foods, whilst they are still less able to deal with the many other still more unsuitable articles of diet with which, through ignorance or mistaken kindness, they are so frequently supplied. It is satisfactory to note that the number of tube bottles found in use is, year by year, a diminishing quantity, but it is equally unsatisfactory that, after all that has been said and written in their condemnation, and with the increasing knowledge of the laws of health, a single specimen of such a dangerous and insanitary article should still be found.

Another duty of the Health Visitors has been that of visiting cases of minor infectious disease, i.e., those not included in the schedule of diseases compulsorily notifiable—the reports of which are systematically received from the head teachers of the various schools. The number of visits made to each of these diseases in each district is set forth in the Summary Table No. 12, but the subjoined Tables A. and B show how each school was affected by the several diseases, and the age periods at which the children were attacked.

TABLE A.

School.	Scarlet Fever.	Measles.	Whooping Cough.	Diphtheria.	Chicken Pox.	Mumps.	Ringworm, Eczema, Sore Eyes, Heads, etc.
Parish Church	1	6	2	–	1	6	3
St. James	–	27	–	–	–	3	–
St. Augustine's	9	3	1	–	–	7	14
St. Saviour's	18	14	–	–	3	6	10
Grimshaw Street British	7	5	2	3	5	3	2
St. Stephen's	15	9	3	5	–	1	8
Christ Church	2	3	–	1	–	2	2
Hincksman Memorial	10	1	–	3	5	3	4
St. Mary's R.C.	10	9	–	1	6	9	22
St. Wilfred's	2	37	–	–	–	1	6
St. Michael's	1	4	–	–	4	12	8
Sacred Heart	3	1	–	1	3	16	7
Ashton Wesleyan	2	1	–	5	4	15	15
St. Andrew's	6	14	–	10	4	16	21
Roebuck Street Council	8	26	–	3	12	20	21
St. Walburge's	2	–	–	2	–	6	–
St. Mark's	3	2	–	–	3	1	5
St. Peter's	3	13	1	4	2	7	13
Emmanuel	3	7	–	2	–	2	3
Plungington Road National	–	32	2	1	–	–	4
Eldon Street Council	1	23	–	–	10	3	4
Moor Park Wesleyan	2	12	–	1	12	16	8
English Martyr's Elementary	5	5	–	2	2	30	14
,, ,, H.G.	–	11	–	–	–	–	–
St. Judes, Kent Street	2	15	–	2	2	35	11
Park Secondary	4	2	–	2	–	–	1
Deepdale Council	–	–	1	–	7	3	1
St. Paul's	22	23	1	–	–	2	6
St. Ignatius' Elementary	9	11	2	1	4	26	11
,, ,, Higher Grade	4	25	1	–	–	9	7
St. Thomas'	–	10	–	–	–	19	2
All Saints'	2	–	–	1	4	34	9
Holy Trinity	–	–	–	2	6	–	8
Orchard U.M.F.C.	–	–	–	–	–	–	–
St. Luke's	10	12	–	–	9	36	19
St. Joseph's	16	32	–	3	1	30	18
St. Matthew's	17	10	1	8	3	20	14
St. Matthew's Branch	5	1	1	–	–	1	–
Tennyson Road Wesleyan	8	11	–	1	–	5	13
St. Mary's National	2	5	–	1	1	2	8
St. Mary's Street Wesleyan	2	–	–	1	–	8	2

TABLE B.—AGES.

	0—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—	Total.
Scarlet Fever	–	1	10	23	32	31	53	45	21	216
Measles	1	15	40	102	93	45	35	40	51	422
Whooping Cough....	–	–	2	5	4	4	1	1	1	18
Diphtheria	–	–	5	10	14	8	10	14	5	66
Chicken Pox	–	5	13	35	30	12	7	6	5	113
Mumps	–	5	23	107	98	78	33	30	41	415
Ringworm, &c.	–	14	24	55	62	36	37	29	67	324

In conjunction with the Education Department, the services of the Health Visitors were utilised in visiting and "following up" cases in which the Schools' Medical Officer, in the course of his examination of the children, had discovered certain defects requiring medical attention. Where the parents failed, or delayed for an unreasonable time in securing this attention, the Visitors took the matter in hand, and by urgent request—if necessary, frequently repeated—succeeded, as a rule, in attaining the desired result.

Another necessary, if disagreeable, duty is that of visiting the Schools, in order to ascertain by inspection that the heads of the children are kept in a clean and healthy condition. This chiefly has reference to the girls' departments, and 10,333 children were in this way examined.

For some instances it was necessary to exclude the children from School until such time as they were fit to mix with their fellow scholars.

A certain number of cases—half-timers—were also reported by the Examining Factory Surgeons as being in a verminous condition, and these were dealt with in a similar manner.

As stated, this is a disagreeable, and somewhat disheartening branch of a Health Visitor's duties, since frequently children, who have been thus attended to, are after an interval found to have relapsed through sheer carelessness into their former filthy condition.

Although no appointment was made during the year, the necessity for securing the services of a special Nurse for the Education Department was, on several occasions, considered, and such an appointment has recently been made.

This to a great extent will relieve the Health Visitors of the work of " following up " the cases reported by the Schools' Medical Officer as being medically defective, and also of that connected with verminous conditions, and so will leave them more time for the discharge of their primary and most important duty, that of visiting the newly-born infants, and giving the advice—so often needed—as to their care and management.

As usual, at the commencement of the year, the various Midwives in the town were personally inspected, together with their registers, bags and appliances. At the date of my last Report, the names of 55 were on the Register, and one has since been added. But against this there have been 4 deaths, and one removal to another district, so that 51 represents the number at present remaining. As anticipated, there has been a gradual improvement in the type of woman carrying on this business, as the older and more ignorant, for various reasons, are withdrawn, so that the number of those possessing a qualification has increased from 7 per cent. at the time of the passing of the Act, in 1902, to 27 per cent. at the present time. There still remain a number who are unable either to read or write, and to whom a thermometer must always remain a mysterious and useless instrument, but these still ply their trade amongst families with whom they have been long associated, and who appear to prefer them and their homely ways to the more " new-fangled " type of nurse. Though much in this respect remains to be wished for, they have to a certain extent learned the value and necessity of cleanliness, and but few cases of Puerperal Fever have, during the past year, come under observation. The number actually reported was 7, of which 2 terminated fatally. There was nothing in the history of any of these cases to give rise to the suspicion that the infection had been transferred from one patient to another. In each instance due precautions were taken, the bedding was either destroyed, or, like the house, thoroughly disinfected, and the midwife—if one had been in attendance—was interviewed, and kept under observation, abstaining from attendance upon other cases, until the dangerous period was over.

The following Table gives useful information as to the attendance upon parturient women during 1913, the town being divided into the four districts over which the Health Visitors have charge, whilst in this case the period dealt with consists of 52 weeks, i.e., from January 1st to December 31st, 1913 This explains any difference found to be existing between certain of the figures in this Table, and those given in the other Tables attached to this Report, which deal with a year of 53 weeks, so as to be in agreement with the returns of the Registrar General.

ATTENDANCE ON WOMEN AT CHILDBIRTH DURING 1913

(JAN. 1st to DEC. 31st).

District.	Number of Births attended by Midwives without Medical help.	Number of Births attended by Doctors.	Number of Births in which Midwife required Medical help.	Total Births Visited.	Per cent. of cases attended by Midwives.	Per cent. of cases attended by Doctor.
"A" ..	373	128	129	630	59%	20%
"B" ..	424	162	104	690	61%	23%
"C" ...	454	132	76	662	68%	20%
"D"....	447	195	96	738	61%	26%
Totals...	1,698	617	405	2,720	62.4%	22.7%

Under the Food and Drugs Adulteration Act, samples to the number of 305 were purchased, and submitted to analytical examination. Of these 235 were bought with all the formalities necessary, if it should afterwards be required to follow up the purchase with legal proceedings ; whilst 70 were obtained informally, the object being to obtain information for guidance as to future action. The samples chiefly represented articles in frequent daily use in the great majority of households, such as Bread, Butter, Milk, Coffee, Lard, Cheese, &c.

Of the 235 articles purchased formally, 216 were returned as being of genuine or satisfactory quality, whilst 19 failed to come up to the required standard. Amongst these last-named samples, 9 were those of milk, which had either been deprived of a portion of the cream, or otherwise showed signs of added water. In one case, in which as much as 40 per cent. of the cream had been withdrawn, a prosecution resulted in a conviction, and a fine of 40/- and costs. The others, being of less serious nature, were met by cautionary letters to the several vendors. For selling chicory under the name of coffee, a shopkeeper was fined 10/- and costs. Five samples of whiskey, out of 26 purchased, were found to have been more or less reduced below the statutory limit, and proceedings taken in the two worst cases resulted in the payment of costs in one instance, and a fine of 10/- and costs in the other.

Of the 70 samples purchased informally, 63 successfully passed the analysis. Two samples of preserved cream were examined, and in one the fat was found to be slightly below the amount which would justify the addition of preservatives. The attention of the dealer was drawn to this, and the matter was remedied.

Under the Act of 1912, a sample of rag-flock was purchased, and proved, upon examination, to come up to the required standard of cleanliness.

Prosecutions taken under the Shop Hours Act, the duties connected with which are carried out by the Sanitary Inspectors, resulted in nine convictions, followed by small fines of 1/- or 2/6 and costs.

The only other case in which legal proceedings were instituted was one against the keeper of a Common Lodging-house, for an offence as regards the management of his premises, and this resulted in the imposition of a fine of 20/- and costs.

I am indebted to the Borough Surveyor for the following statement, showing certain works and improvements carried out under his supervision :—

Sett paving of streets	24,227 sq. yards.
Flagging of footpaths	11,299 ,, ,,

Although these do not come directly under the control of the Health Committee, they have an important bearing not only upon the appearance, but also upon the sanitary condition of a town, since where the front street and footway are clean and well laid, there is an incentive to each householder to give greater attention to the yard and outbuildings at the back of his dwelling.

The demolition of a number of old buildings, known as the Starchhouses, and situated in the centre of the town, has afforded the opportunity for a great improvement. The site has been flagged, is provided with seats, and now furnishes an open breathing space in that part of the town where such a thing was most required.

In Ribbleton Ward, on the eastern side of the town, a piece of land, some 9 acres in extent, has been thrown open as a recreation ground for the benefit of the people—especially the children—of that district. Although itself not actually a Park, it may take its place amongst the numerous Parks of the town, as an open-air space intended to increase the pleasure and promote the good health of the people of the town.

As in previous years, I had the advantage of attending—in company with your Chairman—the Congress of the Royal Sanitary Institute, held in the City of Exeter. Papers dealing with important matters of Sanitation, Municipal administration, etc., were read, and from these and the discussions which followed, a great deal could be learnt, since information was given as to the course of procedure in other towns, and as to the difficulties experienced, and the amount of success obtained, in carrying out various matters connected with sanitary progress.

During the year the town had the benefit of an abundant water supply, obtained from uninhabited moorland gathering grounds, and shown by analysis to be of satisfactory purity, and well suited for all domestic purposes.

The rainfall was quite up to the average amount, a total of 34.99 inches having been registered in the town.

Further information relating to the cause, age, and situation of each of the various deaths, and the direction and amount of the sanitary work done during the year, will be found in the Tables, Plans, and Chart, which, as usual, are appended to this Report.

H. O. PILKINGTON,
MEDICAL OFFICER OF HEALTH.

SEPTEMBER, 1914.

THE ISOLATION HOSPITAL.

ooooo

As will be seen from the accompanying statements and returns, the number of patients dealt with in the Hospital during 1913 was greater than that of any previous year since its occupation in 1908.

To avoid taking up too much space in the various Tables submitted, comparison is made with the past five years, that is, from 1909 to 1913 inclusive.

The prevalence of Scarlet Fever throughout the whole of the past year caused the two pavilions devoted to this disease to be constantly filled, and at times, although the number of patients exceeded the normal recognised standard, certain cases had for a time to be refused admission. Unfortunately, it is in accordance with the usual perversity of things that when there is abundance of room, many parents hesitate, or actually refuse, to allow their children to be removed, whereas, when the Hospital is filled, there is a general desire that such removal should be carried out. Under the last-named condition, a careful scrutiny was made of the circumstances connected with the various cases reported, and as opportunity occurred those were selected for admission in which the retention of the patient at home would involve hardship upon the parents, or would be attended with more than the usual amount of risk to the public health.

The number of cases of Scarlet Fever admitted to Hospital during the year was 360, to which must be added 22 remaining in Hospital at the close of the previous twelve months. There were 10 deaths and 328 recoveries, leaving 44 patients still in residence at the end of the year. The death rate was 2.6 per cent. amongst the patients treated in Hospital, as against 4.7 per cent. amongst those who remained at home.

The majority of the deaths were those of children who entered Hospital in a septic condition, and who succumbed to the severity of the attack very shortly after admission.

At the commencement of the year, the Typhoid pavilion was empty, but 30 patients were afterwards admitted, of whom 10 died and 18 were discharged recovered, leaving 2 still under treatment at the end of the year. But from this number of deaths, 4 may be withdrawn, since they occurred from causes other than Typhoid Fever; one being a case of Meningitis in a child, another General Debility in a young child, the effect of a recent and severe attack of Measles, one Cerebral Effusion in an elderly woman, and one Intestinal Obstruction in a young adult.

Excluding these deaths, the Hospital rate of mortality would be considerably below the Home rate, since even including them the rates stand in the relative proportion of 20 to 23.5 per cent. This is a condition to be expected, since Typhoid Fever is a disease especially requiring careful nursing during the acute stage, and strict supervision as regards diet, etc., during the subsequent period of convalescence.

The cases of Diphtheria admitted amounted to 132, to which must be added 3 under treatment at the beginning of the year. Of this number, 111 recovered, and 16 died, leaving 8 still under treatment. The case mortality in Hospital—11.8 per cent.—was rather higher than that—10.4 per cent.—amongst the patients treated at home, but this is accounted for by the fact that a number of the patients—chiefly very young children—were in a hopeless, and even moribund, condition when received, and in many instances died within a few hours after admission.

The question as to the effect which Isolation Hospitals have had, and are still having, upon the incidence and amount of infectious disease is one which has often been discussed, and about which innumerable statistics, in support of each side, have from time to time been produced. It seems evident that each case of such disease is a centre of infection, and therefore a possible source of danger to the public health, and that on this account it must be to the public advantage that it should be withdrawn and isolated, until such time as the dangerous period of infection has disappeared. Apart from this, and as regards the great majority of cases in a manufacturing town like this, it is certain that it is to the patient's advantage that he should be removed to some institution, where he will have greater air space, and stricter cleanliness than at home, and where he will have the benefit of that attention to all those matters—great and small—which combined together go to form a system of careful and efficient nursing. And it is in the convalescent, as well as in the acute, stage of the illness that the constant observation to which a hospital patient is subjected does so much good, since if it does not always prevent, it at any rate ensures the early recognition of those after effects so frequently met with in the treatment of infectious diseases. A mild case of Scarlet Fever may be followed by Nephritis, Enlarged Glands, or Ear mischief, Cardiac failure, or Paralysis may attack the patient who has apparently recovered from Diphtheria, whilst the mistaken kindness of his friends, by supplying solid food at too early a stage, may bring about the death of the Typhoid convalescent. But in Hospital, where a patient is under constant observation, and where the temperature is regularly and frequently taken, the first appearance of these after-effects is at once noted, and immediate steps can be taken to deal with them.

So that the good effect of the Hospital is apparent in the treatment not only of acute disease, but also of those consequences which, through delay or absolute inattention, may result in the patient becoming more or less a chronic invalid.

The following Table A shows the number of patients from each of the three diseases—Typhoid Fever, Scarlet Fever, and Diphtheria—who were in Hospital at the end of 1912, the number of fresh cases admitted during the past year, the recoveries, deaths, and the number still remaining under treatment on Dec. 31st, 1913.

TABLE A.

Disease.	In Hospital, Dec. 31st, 1912.	Admissions.	Recoveries.	Deaths.	In Hospital. Dec. 31st, 1913
Typhoid Fever ..	0	30	18	10	2
Scarlet Fever....	22	360	328	10	44
Diphtheria	3	132	111	16	8

Table B shows the percentage of deaths from each of the three diseases amongst those admitted to Hospital, and those who were treated at home.

TABLE B.

MORTALITY FROM TYPHOID FEVER, SCARLET FEVER, AND DIPHTHERIA—IN ISOLATION HOSPITAL, AND AT HOME.

CASE RATE.

	Typhoid Fever	Scarlet Fever	Diphtheria.
Hospital Rate	20.0%	2.6%	11.8%
Home Rate	23.5%	4.7%	10.4%

Table C gives a complete and detailed account of the maintenance of the Hospital, and for the purpose of comparison shows the amounts under the various headings for each of the past five years.

TABLE C.

MAINTENANCE, 1913, AND PREVIOUS YEARS.

	£	s.	d.		
Cost of Food (Patients and Staff)	715	5	0	Year	1913
,, ,, ,, ,, ,, ,,	679	17	0	,,	1912
,, ,, ,, ,, ,, ,,	691	7	7	,,	1911
,, ,, ,, ,, ,, ,,	671	16	3	,,	1910
,, ,, ,, ,, ,, ,,	581	5	4	,,	1909
*Cost of Drugs, Dressings, &c.	91	13	11	,,	1913
,, ,, ,, ,, ,,	93	13	9	,,	1912
,, ,, ,, ,, ,,	99	10	0	,,	1911
,, ,, ,, ,, ,,	46	13	8	,,	1910
,, ,, ,, ,, ,,	38	15	0	,,	1909
Cost of Coal and Slack	238	4	5	,,	1913
,, ,, ,, ,,	213	3	10	,,	1912
,, ,, ,, ,,	230	8	11	,,	1911
,, ,, ,, ,,	222	3	0	,,	1910
,, ,, ,, ,,	212	0	0	,,	1909
Salaries	489	17	10	,,	1913
,,	476	14	5	,,	1912
,,	492	15	5	,,	1911
,,	483	5	0	,,	1910
,,	476	10	1	,,	1909
Cost of Food at the rate of:—					
6¼d. per day per person, 3/7¾ per week	£9	9	8	,,	1913
6¼d. ,, ,, ,, 3/7¾ ,, ,,	9	9	8	,,	1912
7d. ,, ,, ,, 4/1 ,, ,,	10	12	4	,,	1911
9¼d. ,, ,, ,, 5/4¾ ,, ,,	14	0	7	,,	1910
8d. ,, ,, ,, 4/8 ,, ,,	12	12	8	,,	1909

Average number of patients per day, 52.4.
Average number of days in Hospital per patient, 36.7.
Average daily cost (based on total expenditure), £6 9s. 9d.
Average cost per patient (based on total expenditure), £4 10s. 9d.

Number of Patients	1913	522
,, ,, ,,	1912	422
,, ,, ,,	1911	439
,, ,, ,,	1910	303
,, ,, ,,	1909	220

* Includes £24 1s. 3d. for Anti-Diphtheria Serum supplied to Medical Practitioners.

Total Expenditure, 1913.

	£	s.	d.
January	233	3	9
February	137	11	4
March	187	8	6
April	174	4	1
May	167	14	11
June	214	4	7
July	*383	0	7
August September	292	16	0
October	180	0	3
November	165	14	7
December	**232	7	0
	£2,368	5	7

* Includes £216 13s. 4d. for Borough and Poor Rates.
** Includes £56 6s. 4d. for Ground Rent.

		£	s.	d.
Total Expenditure, Year	1912	2481	14	9
,, ,, ,,	1911	2414	16	11
,, ,, ,,	1910	2181	8	10
, ,, ,,	1909	2046	12	9

SUMS PAID TO OTHER DEPARTMENTS OF THE CORPORATION DURING THE YEAR 1913.

	£	s.	d
Rates Department, for Rates	216	13	4
Water Department, for Water	47	13	10
Tramways Department, for Current, and Lamps	41	15	7
Estate Committee, for Ground Rent	56	6	4
	£362	9	1

	£	s.	d.
Sums paid to other Departments, 1912	384	5	8
,, ,, ,, ,, ,, ,, 1911	372	5	5
,, ,, ,, ,, ,, ,, 1910	378	14	5
,, ,, ,, ,, ,, ,, 1909	367	11	10

Although, as already stated, the number of patients under treatment was considerably in excess of that for any previous year, the total expenditure was also considerably less than that for either of the two years immediately preceding, and despite the advance in prices, the cost of food per person (patients and staff) was no greater than during 1912, these two years showing the most favourable—i.e., economical—returns for the whole time the Hospital has been in existence.

Although the Municipal Laboratory, instituted and equipped at the same time as the Tuberculosis Dispensary, and occupying part of the same premises, has only been in existence since the middle of the present year, and therefore does not come within the scope of this Report, I cannot help referring to it, since amongst other things it forms such a valuable adjunct to the Hospital. Cases admitted as doubtful Typhoid Fever or Diphtheria can now be at once bacteriologically examined, and the course of treatment, and the length of stay in Hospital can be guided and influenced by the result. It also affords help to the general practitioner, enabling him better to determine the true nature of any particular case, and so to decide as to whether or not it is a suitable one for removal and treatment in Hospital.

Particulars as to the administration and expenditure of the Hospital are set forth in the appended statements, which also admit of a comparison being made with each of the past five years.

Year by year the external appearance of the Hospital continues to improve, especially as regards the administrative block, the plain bare brickwork being now, to a great extent, covered by a luxuriant growth of creeping plants.

The grounds and garden have been well and carefully tended, and the ornamental shrubs and beds of flowering plants serve to attract the attention and excite the admiration of passers-by.

Some further expenditure will in the near future be required for the internal painting and repair of the four pavilions, nothing having been done in this direction since the opening of the Institution in 1907.

Despite the bad effect which, at the time of its erection, it is always stated an Isolation Hospital will have upon the surrounding property, dwelling-houses, of a good class, continue to be erected close to, and indeed overlooking the buildings and grounds.

Two nurses contracted Scarlet Fever in the discharge of their duties, but in both cases the result was satisfactory.

H. O. PILKINGTON,
Medical Superintendent.

September, 1914.

PORT SANITARY.

ooooo

The work of inspection of vessels coming to the Dock and Quay-side has been systematically carried out during the past year. There has been a slight increase in the number of steamships examined, and a decrease of one in the sailing vessels.

The general condition of the vessels was satisfactory, the number described as good having been 1,095, whilst 149 were defective, the unsatisfactory conditions, to the number of 226, being set forth in Table 17.

Some of these required structural alterations, and improvements, but a considerable proportion were due to the dirty, untidy, and careless habits of the crew. In an ordinary forecastle the amount of room and air space is very confined, whilst the light admitted from without, and the means afforded for ventilation, are equally limited.

Without a decent amount of care and cleanliness such places naturally become offensive, the more so as they are constantly occupied ; and a healthy crew, as a rule, pays little attention to its sanitary surroundings. Should, however, one of their number be affected with such a disease as Tuberculosis, the conditions are not only most unsatisfactory for the patient, but greatly increase the danger of the infection being transmitted to one or more of the other occupants of the forecastle.

It is, therefore, important, and indeed necessary, that these places should be kept in a fairly clean and habitable condition, and in this way systematic inspection is of value if even some of the defects discovered may appear to be of a somewhat trivial character, capable of being at once dealt with, and not requiring structural repairs.

There was a general disposition, on the part of all concerned, to comply with the requirements of the Sanitary Inspector, and the defective conditions were in the majority of cases, remedied before the vessel left Port.

Attention has been given to the subject of rats, and throughout the year steady efforts have, by various methods, been made to reduce the number, or at any rate to prevent them from increasing.

A considerable amount of foodstuffs, tinned and otherwise, were brought by coasting vessels to the Dock. Although the great part of these goods had already undergone inspection at the larger ports before transhipment, they were, upon arrival, again subjected to scrutiny. Potatoes, to the weight of 2¼ tons, found to be in a rotten condition, were sorted out and destroyed. Some 10 tons of sugar, damaged by sea water, were returned to the owner for the purpose of re-manufacture.

Very little sickness occurred on board the vessels, either immediately before or during their stay in Port. A Norwegian sailor, forming one of the crew of a timber laden ship coming from Canada, was found to be suffering from Diphtheria. He was practically unable to speak any English, but was desirous of being treated in Hospital. His removal was at once effected, and he made a good recovery, being discharged in good health after a residence of some 25 days. The Sanitary Inspector had made arrangements for his return home, and, upon his leaving the Hospital, took charge of him, and saw him on board a vessel bound for one of the Norwegian Ports.

The forecastle of the vessel upon which he arrived was sprayed at the time of his removal, and he and his clothes and other effects were again disinfected immediately before his leaving the Hospital.

H. O. PILKINGTON,
PORT MEDICAL OFFICER.

September, 1914

TABLE No. 1.

Number and Causes of Deaths at different Ages, for the Year 1913.

Cause of Death.	Under 1 Year.	1 to 2	2 to 5.	5 to 15	15 to 25	25 to 45.	45 to 65	65 and over.	Total.	Corresponding year, 1912.	Corresponding year, 1911.	Corresponding year 1910.	Average for the past six years.
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever	...	1	1	1	1	5	...	1	10	8	19	20	15·55
Scarlatina	2	4	13	10	...	.	...	...	29	36	19	8	16·66
Measles	17	31	16	1	...		...	...	65	90	5	26	50·17
Diarrhœa	71	19	2	...	...	...	...	...	92	24	136	93	79·52
Whooping Cough	2	3	...	...	...	...	...	...	5	42	20	5	25·83
Diphtheria	2	2	18	9	...	...	...	...	31	39	32	18	23·83
Croup	...	...	2	2	...	...	...	...	4	7	6	...	4·70
Consumption	2	2	3	6	22	36	33	4	108	96	111	97	105·83
Bronchitis	61	30	11	4	..	13	51	66	236	200	199	188	216·70
Inflammation of Lungs	24	13	8	5	6	19	35	9	119	122	117	120	109·33
Teething, Premature Births and Debility.	267	29	26	6	...	.	...	...	328	259	324	365	327·00
Old Age	...	...	...	...	...	...	4	114	118	111	94	126	118·00
Violence, &c.	4	2	3	4	5	15	15	8	56	62	56	51	60·17
Other Diseases	3	3	11	30	32	108	277	206	670	701	679	641	670·00
Total	455	139	114	78	66	196	415	408	1871	1797	1817	1758	1823·16

TABLE No. 2.

Number and Causes of Deaths in each Month of the Year 1913.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever	1	3	1	...	...	...	...	2	1	1	...	1	10
Scarlatina	3	2	4	2	...	3	2	...	1	3	3	6	29
Measles	44	10	6	1	1	2	...	...	...	...	1	...	65
Diarrhœa	...	...	1	1	3	11	2	7	24	35	6	2	92
Whooping Cough	...	1	2	...	...	...	..	...	...	1	...	1	5
Diphtheria	2	...	2	2	2	3	2	1	4	5	3	5	31
Croup	...	1	...	1	1	...	...	...	...	...	...	1	4
Consumption	6	16	16	8	7	6	6	12	7	11	4	9	108
Bronchitis	40	53	34	34	15	5	4	5	6	9	14	17	236
Inflammation of Lungs	16	10	9	18	7	4	7	10	4	10	10	14	119
Teething, Premature Births, and Debility	33	20	27	32	38	19	25	26	33	34	21	20	328
Old Age	14	8	11	19	6	7	14	9	8	6	11	5	118
Violence, &c.	8	3	5	7	1	5	5	7	3	4	4	4	56
Other Diseases	70	59	49	75	55	49	44	53	42	54	54	66	670
Total	237	186	167	200	136	114	111	132	133	173	131	151	1871

TABLE No. 3.

Number and Causes of Deaths in each Ward for the Year 1913.

Wards.	Small Pox.	Fever.	Scarlatina.	Measles.	Diarrhœa.	Whooping Cough.	Diphtheria.	Croup.	Consumption.	Bronchitis.	Inflammation of Lungs	Teething, Premature Births, & Debility.	Old Age.	Violence, &c.	Other Diseases.	Total Deaths.	Rate per 1,000 per ann.	Total Births.	Rate per 1,000 per ann.	Population.
St. John's Ward.....	...	3	3	5	15	...	3	1	11	34	12	33	21	4	59	204	17·24	261	22·06	11830
Avenham Ward......	...	...	1	2	3	...	2	1	6	10	6	19	7	2	42	101	14·01	120	16·64	7210
Christ Church Ward	...	1	1	6	7	...	3	...	2	13	6	27	6	3	37	112	13·20	215	25·33	8488
Ashton Ward.........	...	1	...	2	4	...	7	...	6	9	3	9	6	3	46	96	11·00	176	20·17	8725
Maudland Ward......	...	...	...	4	6	...	3	...	7	17	10	30	9	2	44	133	14·10	238	25·23	9432
St. Peter's Ward...	...	1	4	5	1	1	4	...	10	21	13	26	19	1	41	146	12·50	289	24·74	11684
Moor Brook Ward..	...	...	...	1	7	...	...	...	6	13	3	27	10	1	60	128	14·13	204	22·53	9055
Park Ward............	...	...	3	12	13	...	2	...	13	29	18	40	9	5	70	215	14·60	384	26·09	14723
Trinity Ward	...	...	4	6	18	2	2	1	12	32	19	37	7	3	73	216	21·18	300	29·41	10200
Deepdale Ward......	...	1	4	9	7	1	4	...	13	22	10	35	10	2	53	171	16·55	264	25·56	10330
Ribbleton Ward.....	...	2	4	7	6	1	1	1	13	21	9	23	10	2	49	149	16·65	241	26·93	8949
Fishwick Ward.......	...	...	5	5	5	...	...	...	9	15	4	18	3	2	37	102	13·70	171	22·97	7444
Goal, Infirmary, &c	...	1	...	1	...	...	...	...	...	...	6	4	1	26	59	98	...	1	...	...
Total............	...	10	29	65	92	5	31	4	108	236	119	328	118	56	670	1871	15·55	2864	23·80	118070

Death Rate per annum, per 1,000 of Population for the year .... 15·55
Do. Do. Do. Average for 10 years .... 16·11
Infantile Mortality (Deaths under one year per 1,000 Births) for the year 159
Do. Do. Do. Average for 10 years 160
Per centage of Deaths under one year to total deaths for the Year .... 24·32
Do. Do. Do. Average for 10 years .... 25·74

TABLE No. 4.

Number of Deaths in each Ward during each Month of 1913.

Wards	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
St. John's Ward..................	20	24	24	21	20	13	9	16	19	17	7	14	204
Avenham Ward..................	14	9	6	12	8	3	8	11	7	8	7	8	101
Christ Church Ward...........	17	9	10	12	9	9	5	6	10	11	7	7	112
Ashton Ward.....................	11	11	10	9	7	4	5	6	8	7	8	10	96
Maudland Ward..................	10	14	14	11	10	11	9	9	8	12	12	13	133
St. Peter's Ward................	14	22	13	16	15	7	10	9	5	13	9	13	146
Moor Brook Ward..............	16	10	9	16	6	6	9	8	12	9	9	18	128
Park Ward.....................	32	17	20	25	14	11	17	11	14	18	17	20	215
Trinity Ward	28	21	17	15	15	17	9	21	18	23	20	11	216
Deepdale Ward..................	26	17	17	16	8	12	9	12	12	17	17	9	171
Ribbleton Ward..................	20	15	12	20	10	12	4	8	9	16	7	16	149
Fishwick Ward....................	11	9	7	16	6	4	9	11	7	14	4	4	102
Goal,Infirmary,&c................	18	8	8	11	8	5	9	4	4	8	7	8	98
Total	237	186	167	200	136	114	111	132	133	173	131	151	1871

TABLE 1A.

Vital Statistics of Whole District during 1913 and Previous Years.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un-correc'd Number.	Nett.						Und'r 1 yr. of age		At all Ages.	
			Number.	Rate.	Number.	Rate.	of Non-resid'ts registered in the district	of Residents not regist'd in the district	Number.	Rate per 1,000 Nett Births.	Number	Rate.
1908	117,799	–	3309	27.56	1975	16.45	28	175	516	156	2122	17.67
1909	118,519	–	3027	25.54	1721	14.52	52	173	416	137	1842	15.54
1910	119,253	–	2812	23.58	1758	14.74	42	213	438	156	1929	16.17
1911	117,216	–	2726	23.25	1817	15.50	45	212	473	173	1984	16.92
1912	117,630	2724	2753	23.40	1797	15.28	32	207	342	124	1972	16.76
1913	118,070	2864	2888	23.95	1871	15.55	39	211	462	160	2043	16.98

Total population at all ages	117,113	At Census of 1911.
Number of inhabited houses	26,066	
Average number of persons per house..	4·49	

Area of District in acres (Land and Inland Water) 4,029

TABLE 2A.

Cases of Infectious Disease notified during the Year 1913.

NOTIFIABLE DISEASES.	NUMBER OF CASES NOTIFIED.								TOTAL CASES NOTIFIED IN EACH LOCALITY.												TOTAL CASES REMOVED TO HOSPITAL.
	At all Ages.	At Ages—Years.							St. John's Ward.	Avenham Ward.	Christ Church Ward.	Ashton Ward.	Maudland Ward.	St. Peter's Ward.	Moorbrook Ward.	Park Ward.	Trinity Ward.	Deepdale Ward.	Ribbleton Ward.	Fishwick Ward.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.													
Small Pox	...	...	...	...	...	. .	...	...	...	...	...		...	...	...	...	...	...	...	...	...
Cholera (c) Plague (p)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	277	5	65	134	38	30	5	...	17	18	39	60	30	30	14	19	15	13	16	6	132
Erysipelas	108	3	...	10	21	43	25	6	5	1	21	8	17	9	8	8	15	5	4	7	...
Scarlet Fever	768	11	246	460	39	11	1		103	50	62	41	50	37	30	72	93	82	69	79	360
Typhus Fever	...	...	...	.	...	...	..	...	...	...	...		...	...	...		...	...	...	...	..
Enteric Fever	47	..	7	12	8	15	3	2	9	2	7	1	4	4	4	3	5	3	2	3	30
Relapsing Fever Continued Fever	...	...	..	.	...	...	...	...	..	...	...	...	.	...	.	...	..	...	...	...	...
Puerperal Fever	7	...		...	4	3	...	...	...	..	1	...	2	2	1	...	1	...	.	...	...
Cerebro-spinal Meningitis	...	...	...	...	...	...	...	...	.	.	...	...	..	...	..	...	...	...	...	...	...
Poliomyelitis	...	...	...	..	..	...	...	.	...	.	...	...	...	..	...	...	...	...	...	...	...
Pulmonary Tuberculosis	222	5	3	16	62	84	50	2	28	9	8	7	24	25	14	32	24	19	21	11	...
Other forms of Tuberculosis	83	4	8	29	22	14	5	1	5	4	9	9	7	5	6	13	5	11	3	6	...
Totals	1512	28	329	661	194	200	89	11	167	84	147	126	134	112	77	147	158	133	115	112	522

Isolation Hospital—{ Preston Borough Isolation Hospital,
Deepdale Road.

Total available beds—56. Number of Diseases that can be concurrently treated—3.

TABLE 3A.

Causes of, and Ages at, Death during the Year 1913.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of "Residents" or "non-Residents" in Institutions in the District.
	All Ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and up-wards.	
All Causes :—										
Certified	1982	445	137	111	77	71	220	462	459	...
Uncertified	61	17	...	1	2	2	6	17	16	...
Enteric Fever	10	...	1	1	1	1	5	...	1	7
Small-pox	...	...	...	...	...	...	...	...	...	...
Measles	65	17	31	16	1	...	...	...	...	1
Scarlet Fever	29	2	4	13	10	...	...	...	...	7
Whooping Cough	5	2	3	...	...	...	...	...	...	...
Diphtheria and Membranous Croup	32	3	2	18	9	...	...	...	...	16
Influenza	25	...	...	...	1	1	4	7	12	2
Erysipelas	1	1	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis)	128	2	2	5	6	26	44	42	1	...
Tuberculous Meningitis	15	2	2	8	2	1	...	...	...	1
Other Tuberculous Diseases	38	13	5	4	5	5	2	4	...	1
Cancer, Malignant Disease	109	...	...	...	...	1	15	61	32	12
Rheumatic Fever	5	...	...	...	...	...	1	3	1	...
Meningitis	11	1	3	3	4	...	...	...	...	...
Organic Heart Disease	171	...	...	2	6	9	27	76	51	2
Bronchitis	182	28	9	5	2	...	14	57	67	...
Pneumonia (all forms)	202	59	33	13	7	7	27	41	15	7
Other Diseases of Respiratory Organs	8	...	...	3	2	...	1	1	1	1
Diarrhœa and Enteritis	133	105	23	3	1	...	...	...	1	...
Appendicitis and Typhlitis	6	...	...	1	...	1	1	1	2	3
Cirrhosis of Liver	12	...	...	...	...	...	2	9	1	1
Alcoholism	1	...	...	...	...	...	...	1	...	...
Nephritis and Bright's Disease	53	...	...	2	3	1	8	28	11	5
Puerperal Fever	2	...	...	...	...	...	2	...	...	...
Diseases and Accidents of Pregnancy and Parturition	6	...	...	...	...	1	5	...	...	1
Congenital Debility and Malformation, including Premature Birth	160	153	4	3	...	...	...	...	...	1
Violent Deaths, excluding Suicide	41	4	1	2	4	4	10	8	8	23
Suicide	9	...	...	...	...	1	3	4	1	1
Other Defined Diseases	571	70	14	10	13	14	49	134	267	44
Diseases ill-defined or Unknown	13	...	...	...	2	...	6	2	3	1
TOTALS	2043	462	137	112	79	73	226	479	475	137

TABLE 4A.

Nett Deaths from stated Causes at various Ages under One Year of age during the Year 1913.

CAUSE OF DEATH.	Under 1 Week.	1 - 2 Weeks.	2 - 3 Weeks.	3 - 4 Weeks.	Total under 1 Month.	1 - 3 Months.	3 - 6 Months.	6 - 9 Months.	9 - 12 Months.	Total Deaths under One Year.
All Causes:—										
Certified	72	17	27	18	134	75	106	73	57	311
Uncertified	5	...	1	...	6	2	5	2	2	11
Small Pox	...	...	...	...	...	...	...	...	...	...
Chicken Pox	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	1	3	7	6	17
Scarlet Fever	...	...	...	...	...	...	...	1	1	2
Whooping Cough	...	...	...	...	...	...	1	1	...	2
Diphtheria and Croup	...	...	...	...	...	...	...	...	2	2
Erysipelas	...	...	...	...	...	1	...	...	...	1
Tuberculous Meningitis	...	...	...	...	...	1	1	...	...	2
Abdominal Tuberculosis	...	...	...	...	...	1	6	2	...	9
Other Tuberculous Diseases	...	...	...	...	...	...	1	3	...	4
Meningitis (not Tuberculous)	...	...	...	...	...	...	1	...	...	1
Convulsions	5	2	4	1	12	9	9	...	5	35
Laryngitis	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	2	...	2	4	6	12	12	3	37
Pneumonia (all forms)	1	...	...	...	1	7	12	14	16	50
Diarrhœa	...	2	4	..	6	18	31	8	8	71
Enteritis	...	...	2	2	4	4	11	10	5	34
Gastritis	...	...	1	...	1	...	...	1	...	2
Syphilis	...	1	...	...	1	1	...	...	1	3
Rickets	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying	1	...	...	..	1	1	2	...	...	4
Injury at Birth	2	...	...	...	2	...	...	...	...	2
Atelectasis	5	...	...	...	5	...	...	...	...	5
Congenital Malformations	6	...	1	1	8	1	...	2	1	12
Premature Birth	43	4	4	3	54	4	1	1	...	60
Atrophy, Debility and Marasmus	6	6	9	7	28	19	20	11	3	81
Other causes	8	...	3	2	13	3	...	2	8	26
Total	77	17	28	18	140	77	111	75	59	462

Nett Births in the Year, Legitimate	... ...	2,756
„ Illegitimate	... ...	108
Nett Deaths in Year of Legitimate Infants	... ...	433
„ „ Illegitimate „	... ...	29

TABLE No. 5.

Birth Rate, Death Rate, and Analysis of the Zymotic Death Rate in 39 of the largest English Towns, for the 53 weeks ending 3rd January, 1914.

Compiled from the Registrar-General's Returns.

NAME OF TOWN.	Estimated Population. 1913.	Birth Rate.	Recorded Death Rate.	Enteric Fever.	Small Pox.	Measles.	Scarlet Fever.	Wh'ping Cough.	Diphtheria.	Diarrhœa & Enteritis under 2years	Deaths under 1 year to 1,000 Births.
London	4,518,191	24.8	14.2	0.02	0.00	0.35	0.04	0.18	0.09	27.41	104
Croydon	178,094	21.9	11.6	0.03	0.00	0.33	0.03	0.14	0.08	20.66	94
West Ham	294,223	31.0	14.5	0.03	0.00	0.23	0.06	0.18	0.10	39.24	108
Brighton	133,096	18.3	13.5	0.04	0.00	0.23	0.08	0.34	0.05	21.58	117
Portsmouth	241,256	24.4	12.2	0.09	0.00	0.10	0.08	0.07	0.35	18.75	90
Norwich	123,288	22.0	13.8	0.01	0.00	0.41	0.05	0.28	0.14	25.04	115
Plymouth	113,083	23.5	15.6	0.06	0.00	0.50	0.06	0.05	0.12	30.19	125
Bristol	361,362	22.5	12.7	0.01	0.00	0.13	0.01	0.15	0.08	18.59	96
Wolverhampton	95,601	26.5	15.6	0.04	0.00	0.83	0.02	0.15	0.07	40.14	130
Birmingham	859,644	27.3	14.7	0.02	0.00	0.46	0.21	0.18	0.19	35.90	129
Leicester	230,970	22.6	13.3	0.01	0.00	0.15	0.03	0.05	0.08	29.06	120
Nottingham	264,735	22.7	14.1	0.03	0.00	0.07	0.06	0.16	0.15	33.54	130
Derby	125,462	23.6	12.5	0.02	0.00	0.09	0.01	0.04	0.04	22.70	101
Birkenhead	135,557	29.0	14.4	0.01	0.00	0.06	0.04	0.28	0.18	45.30	116
Liverpool	756,553	30.0	17.9	0.04	0.00	0.42	0.07	0.31	0.09	38.19	131
Bolton	183,879	21.6	15.7	0.09	0.00	0.45	0.02	0.25	0.15	43.91	144
Manchester	730,976	26.0	15.6	0.06	0.00	0.36	0.13	0.19	0.13	31.94	127
Salford	233,849	26.7	15.8	0.11	0.00	0.54	0.12	0.17	0.12	30.88	136
Oldham	149,936	23.2	16.8	0.02	0.00	0.25	0.13	0.23	0.12	34.35	141
Burnley	109,021	22.9	16.5	0.03	0.00	0.48	0.06	0.03	0.17	53.57	170
Blackburn	133,971	21.8	15.6	0.06	0.00	0.07	0.01	0.08	0.05	41.08	148
Preston	**118,070**	**23.9**	**17.0**	**0.08**	**0.00**	**0.58**	**0.28**	**0.05**	**0.26**	**50.95**	**160**
Huddersfield	110,882	19.5	14.5	0.05	0.00	0.23	0.06	0.07	0.05	17.81	104
Halifax	100,740	18.8	15.4	0.08	0.00	0.09	0.02	0.04	0.17	17.79	101
Bradford	290,540	19.7	14.9	0.06	0.00	0.12	0.03	0.08	0.18	28.69	127
Leeds	457,295	23.5	15.4	0.04	0.00	0.23	0.03	0.20	0.18	30.00	134
Sheffield	471,662	28.2	15.7	0.04	0.00	0.78	0.16	0.14	0.12	30.09	128
Hull	287,032	28.0	14.8	0.12	0.00	0.04	0.01	0.27	0.11	40.89	128
Sunderland	152,377	31.0	17.7	0.01	0.00	0.51	0.13	0.12	0.14	37.26	135
Gateshead	118,601	29.2	14.4	0.10	0.00	0.11	0.01	0.17	0.06	30.33	123
Newcastle	271,295	27.2	15.1	0.05	0.00	0.24	0.08	0.35	0.10	16.93	128
Cardiff	186,554	25.9	13.4	0.04	0.00	0.06	0.09	0.09	0.21	31.85	115
Swansea	119,485	28.0	14.3	0.04	0.00	0.12	0.03	0.13	0.22	34.25	128
Warrington	74,065	29.4	15.3	0.12	0.00	0.29	0.09	0.32	0.12	39.49	131
St. Helens	99,460	31.9	18.9	0.05	0.00	1.98	0.27	0.19	0.15	36.70	157
Stockport	112,480	23.1	15.3	0.09	0.00	0.29	0.01	0.11	0.12	46.51	145
Middlesbrough	107,993	31.2	17.6	0.02	0.00	0.48	0.20	0.21	0.19	31.32	131
South Shields	110,513	31.0	17.5	0.06	0.00	0.53	0.27	0.09	0.07	18.15	117
Northampton	90,793	20.2	12.6	0.04	0.00	0.40	0.07	0.04	0.30	22.39	95

TABLE No. 6.

The estimated Population, Number of Births and Deaths, Rates per thousand, and natural increase within the Borough, for each Year since 1844.

Years.	Estimated Population.	No. of Deaths.	Death Rate per 1,000.	No. of Births.	Birth Rate per 1,000.	Natural Increase.
1844	56,520	1380	24.42	2200	38.92	820
1845	58,360	1635	28.01	2293	39.29	558
1846	60,200	2189	36.36	2475	41.09	286
1847	62,050	2059	33.18	2268	36.59	209
1848	63,900	1550	24.26	2223	34.79	673
1849	65,750	1751	26.63	2403	36.55	652
1850	67,000	1745	25.81	2649	39.19	904
1851	69,450	2241	32.26	2803	40.36	562
1852	70,850	2284	32.23	2998	42.31	714
1853	72,250	2346	32.47	3072	42.51	726
1854	73,600	2013	27.35	3037	41.26	1024
1855	75,000	2557	34.10	3071	40.95	514
1856	76,400	2251	29.46	3151	41.24	900
1857	77,800	2131	27.39	3286	42.24	1155
1858	79,200	2545	32.13	3082	38.91	537
1859	80,600	2111	26.19	3399	42.17	1288
1860	82,000	2236	27.27	3381	41.23	1145
1861	82,985	2585	31.15	3626	43.69	1041
1862	83,231	2411	28.97	3522	42.32	1111
1863	83,477	2142	25.66	3388	40.57	1246
1864	83,686	2432	29.06	3422	40.89	990
1865	83,932	2708	32.26	3338	39.77	630
1866	84,178	2854	33.90	3535	41.99	681
1867	84,424	2608	30.89	3732	44.20	1124
1868	84,670	2798	33.04	3710	43.82	912
1869	84,916	2248	26.47	3434	40.44	1186
1870	85,162	2406	28.25	3486	40.93	1080
1871	85,427	2541	29.75	3438	40.24	897
1872	85,654	2294	26.78	3704	43.24	1410
1873	86,000	2899	33.71	3558	41.37	659
1874	86,000	2962	34.44	3582	41.65	620
1875	86,000	2581	30.01	3499	40.68	918
1876	86,600	2331	26.92	3623	41.84	1292
1877	87,000	2336	26.85	3601	41.39	1265
1878	87,300	2502	28.66	3697	42.35	1195
1879	87,600	2395	27.34	3403	38.83	1068
1880	88,000	2425	27.35	3475	39.49	1050
1881	96,524	2044	21.17	3489	36.14	1445
1882	97,656	2511	25.71	3785	38.76	1214
1883	98,564	2345	23.79	3576	36.28	1231
1884	99,481	2540	25.53	3745	37.64	1205
1885	100,406	2563	25.52	3868	38.52	1305
1886	101,340	2769	27.32	3961	39.08	1192
1887	102,283	2703	26.42	3870	37.83	1167
1888	103,234	2326	22.53	3823	37.03	1497
1889	104,194	2019	28.97	3912	37.63	902
1890	105,163	2726	25.92	3718	35.35	992
1891	107,864	2807	26.02	3830	35.50	1023
1892	109,038	2481	22.75	3686	33.80	1205
1893	110,225	2753	24.97	3809	34.55	1056
1894	111,425	2186	19.61	3545	31.81	1359
1895	112,638	2528	22.44	3702	32.95	1174
1896	113,864	2191	19.24	3673	32.25	1482
1897	115,103	2687	23.34	3687	32.03	1000
1898	116,356	2107	18.10	3559	30.58	1452
1899	117,622	2492	21.18	3492	29.68	1000
1900	118,902	2636	22.16	3410	28.67	774
1901	113,117	2213	19.56	3418	30.21	1205
1902	113,766	1998	17.56	3278	28.81	1280
1903	114,404	1955	17.08	3453	30.18	1498
1904	115,055	2091	17.83	3314	28.26	1223
1905	115,721	1906	16.47	3259	28.16	1353
1906	116,399	2065	17.74	3317	28.49	1252
1907	117,093	2003	17.10	3124	26.68	1121
1908	117,799	1975	16.45	3309	27.56	1334
1909	118,519	1721	14.52	3027	25.54	1306
1910	119,253	1758	14.74	2812	23.58	1054
1911	117,216	1817	15.50	2726	23.25	909
1912	117,630	1797	15.28	2724	23.16	927
1913	118,070	1871	15.55	2864	23.80	993

TABLE No. 7.

Per centage of Deaths from Zymotic Diseases to Sickness reported during the Year 1913.

Disease.	No. of Cases Reported.	No. of Deaths.	Per centage.
Small Pox	...	...	...
Typhus Fever	...	...	...
Typhoid Fever	47	10	21·28
Scarlet Fever	768	29	3·80
Diphtheria	277	31	11·20
Puerperal Fever	7	2	28·60
Erysipelas	108	1	0·83

TABLE No. 8.

Meteorological Observations for the Year 1913.

Month.	Attached Thermometer.	Barometer.	Barometer corrected to 32 deg. Fahr.	Hygrometer		Temperature in Shade.		Earth Thermometer		Mean Daily Temperature.	Humidity Saturation=100.	Rainfall in inches.	Number of Deaths from	
				Dry Bulb.	Wet Bulb.	Maxi-mum	Mini-mum	One Foot.	Four Feet.				Bron-chitis	Diarr-hœa.
January	39·5	29·601	29·718	40·6	39·5	43·5	36·2	...	...	39·9	88	4·24	40	...
February	40·8	29·803	30·166	42·3	40·0	46·3	36·8	...	...	41·5	86	1·50	53	...
March	42·2	29·651	29·759	43·5	41·4	47·4	37·2	...	...	42·3	86	4·13	34	1
April	46·9	29·705	29·801	47·9	44·5	52·3	39·9	...	...	46·1	78	5·03	34	1
May	53·7	29·803	29·881	55·0	51·2	59·0	46·7	...	...	52·9	80	2·23	15	3
June	58·1	29·949	30·011	58·4	53·9	63·1	51·1	...	...	57·1	72	2·46	5	11
July	59·8	30·035	30·091	60·2	55·9	65·0	53·4	...	54·4	59·3	74	2·03	4	2
August	59·8	29·979	30·036	61·0	56·8	66·3	53·3	...	55·9	59·7	75	2·24	5	7
September	57·6	29·890	29·949	59·2	55·4	64·2	52·2	...	55·7	58·2	78	1·80	6	24
October	52·1	29·759	29·839	53·2	50·8	57·2	...	...	53·7	...	84	1·97	9	35
November	47·3	29·691	29·785	47·8	46·6	50·9	43·8	...	49·6	47·3	93	4·50	14	6
December	41·8	29·986	30·095	42·7	41·4	45·5	38·6	...	46·9	42·1	89	2·86	17	2

TABLE No. 9.

SANITARY INSPECTORS.

Summary of Work done during the Year 1913.

	No. 1 District	No. 2 District.	No. 3 District.	No. 4 District.	Total.
Number of Complaints received	360	553	360	500	1,773
Inspections of Dwelling Houses	3983	916	3002	3156	11,057
,, Infected Houses	562	253	321	481	1,617
,, Lodging Houses	22	609	98	3609	4,338
,, Cellar Dwellings	...	...	61	11	72
,, Canal Boats	...	...	...	115	115
,, Vans and Tents	12	46	26	47	131
,, Schools	51	13	66	53	183
,, Cowsheds, Dairies and Milkshops	198	4	148	346	696
,, Slaughter Houses	82	...	126	106	314
,, Markets	24	74	40	1286	1,424
,, Drains and Yards	3678	1038	3006	4047	11,769
Inspections under Housing and Town Planning Act	140	152	149	156	597
Re-Inspections	1500	...	239	2817	4,556
Smoke Observations	87	57	122	129	395
Circular Letters sent	90	71	111	99	371
Notices served for Defective Slopstone Pipes	28	4	71	16	119
,, ,, Drains	116	111	174	179	580
,, ,, Spouts	42	5	104	31	182
,, ,, Water Closets	102	53	136	99	390
,, ,, Yard Pavement	19	11	2	13	45
,, ,, Cowsheds	3	...	...	...	3
,, Overcrowding	...	...	2	1	3
,, Limewashing	68	12	58	16	154
,, Manure Accumulation	17	2	21	4	44
,, Stagnant Water	3	...	...	...	3
,, General Nuisances	70	31	64	33	198
Notices served to Flag Yards	24	1	16	133	174
,, Flag Lobbies	...	...	...	26	26
,, Convert Privies into W.C.'s	...	...	6	...	6
,, Supply Ashpails	45	21	9	30	105
House Drains Tested	74	43	36	103	256
School Drains Tested	...	...	2	1	3
Houses Disinfected	291	374	301	344	1,310
Schools Disinfected	10	9	11	18	48
Number of Premises from which Bedding was Removed to Disinfecting Station	10	7	10	11	38
Number of Ashpails cleansed	...	...	...	...	1,771,471
,, Animals removed	...	...	...	...	486
,, Ashpits ,,	48	41	209	112	410
Fish Condemned and Destroyed	...	...	Wet Dry Shell	7110lbs. 1020 ,, 790 ,,	8,920 lbs.
Visits under Shops Act, 1912	459	300	500	495	1,754
Number of Prosecutions under Shops Act	...	...	5	4	9

TABLE No. 5A.

Factories, Workshops, Workplaces and Home-Work.

1.—INSPECTION.

Premises.	Number of Inspections.	Number of Written Notices.	Number of Prosecutions.
Factories (including Factory Laundries)	105	2	...
Workshops (including Workshop Laundries)	1907		...
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	83		...
Total	2095	2	...

2.—DEFECTS FOUND.

Particulars.	Number of Defects. Found.	Number of Defects. Remedied.	Number of Defects. Referred to H.M. Inspector.	Number of Prosecutions.
Nuisances under the Public Health Acts :—				
Want of Cleanliness	32	32		
Want of Ventilation	...	...		
Overcrowding	...	...		
Want of drainage of floors	31	31		
Other Nuisances	37	36		
Sanitary accommodation — insufficient	8	5		
Sanitary accommodation — unsuitable or defective	58	56		
Sanitary accommodation — not separate for sexes	...	...		
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse (s. 101)	...	...		
Breach of special Sanitary requirements for bakehouses (s.s. 97 to 100)	...	...		
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report)	...	...		
Total	166	160		

3.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.									OUTWORK IN UNWHOLESOME PREMISES, SECTION 108			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.						Notices served on Occupiers as to keeping or sending Lists.	Prosecutions.		Instances.	Notices served.	Prosecutions.	Instances.	Orders made (S 110).	Prosecutions (Sections 109, 110).
	Twice in the Year.			Once in the Year.				Failing to keep or permit Inspection of Lists.	Failing to send Lists.						
	Lists.	Outworkers. Con-tractors.	Outworkers. Work-men.	Lists.	Outworkers. Con-tractors.	Outworkers. Work-men.									
Wearing Apparel:—															
(1) making, &c.	19	4	30	11	2	23	...	...	...	...	...	...	...	...	...
(2) cleaning and washing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	38	8	60	11	2	23	...	...	...	...	...	...	...	...	...

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Factories	121
Workshops	875
Workplaces	85
Retail Bakehouses	149
Public do.	19
Total number of Workshops on Register	1249

5.—OTHER MATTERS.

Class.		Number.
Matters notified to H.M. Inspector of Factories:—		
Failure to affix Abstract of the Factory and Workshop Act (s. 133) 1901 ...		...
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5). 1901	Notified by H.M. Inspector	42
	Reports (of action taken) sent to H.M. Inspector...	42
Other		124
Underground Bakehouses (s. 101):—		
Certificates granted during the year		...
In use at the end of the year		3

TABLE No. 10.

Summary of Work done under the Factory and Workshop Act during the Year 1913.

	No. 1 District.	No. 2 District.	No. 3 District.	No. 4 District.	Total.
Number of Factories and Workshops on Register...	214	434	167	434	1249
,, Circular Letters sent re Out-workers...	...	21	2	38	61
,, Out-workers reported	3	36	4	60	103
Visits to Factories and Workshops	400	197	396	459	1452
,, Retail Bakehouses	100	130	70	151	451
,, Public Bakehouses	50	23	16	103	192
,, Home-workers premises	12	20	21	49	102
Drains tested	6	...	2	4	12
Defects found and Remedied :—					
Defective Drains	8	1	4	18	31
,, Spouts and Roofs	1	1	...	...	2
,, Water Closets	16	15	18	9	58
Limewashing required	8	4	5	15	32
General Nuisances	8	4	8	4	24
Insufficient W.C. accommodation for Females	...	...	...	5	5
,, ,, Males	1	...	...	2	3
No receptacle for Refuse	...	...	...	...	...
Manure Accumulations	6	...	...	...	6
Various	...	...	...	5	5

TABLE No. 11.

List of Factories and Workshops on Register during the Year 1913.

		No. 1 District.	No. 2 District.	No. 3 District.	No. 4 District.	Total.
Bakers and Confectioners (Retail)		36	51	17	45	149
Bakers (Public)		3	7	4	5	19
Basket Makers		...	2	2	1	5
Beer Bottlers		3	2	1	6	12
Biscuit Makers		...	4	1	...	5
Boot, Shoe, and Clog Makers, Leather Curriers		24	56	22	32	134
Brass Founders		...	2	2	2	6
Breweries		1	4	2	3	10
Brush Makers		1	1	...	2	4
Cabinet Makers, Wood Carvers, Upholsterers		4	12	3	20	39
Coach Builders		1	5	...	5	11
Cotton Waste Cleaners and Dealers		...	1	...	2	3
Cotton Manufacturers		23	14	20	8	65
Coopers		1	3	1	1	6
Cycle Makers and Enamellers		10	11	4	7	32
Engravers		3	...	...	6	9
French Polishers		1	2	...	3	6
Ironfounders		4	5	5	4	18
Joiners, Builders, Wheelwrights, Wood Turners		12	24	6	16	58
Laundries		2	...	3	1	6
Marine Store Dealers		...	5	...	4	9
Milliners, Dressmakers, Underclothing Manufacturers		24	90	24	71	209
Picture Framers, Mount Cutters, Gilders		2	4	3	6	15
Photographers		4	4	1	3	12
Plumbers, Painters		10	13	8	20	51
Printers, Bookbinders		...	1	1	18	20
Restaurant Keepers		6	5	3	4	18
Rope and Twine Makers		2	...	2	...	4
Saddlers		1	6	1	4	12
Smiths, Black and White and Tinplate		5	9	5	27	46
Stone and Marble Masons		4	4	3	4	15
Sugar Boilers		4	1	1	...	6
Tailors		10	40	8	59	117
Watch Makers and Jewellers		8	14	8	10	40
Wire Workers		...	1	1	1	3
Offensive Trades	Fell Mongers	...	...	...	1	1
	Soap Boilers	...	...	1	3	4
	Fat and Tallow Melters	1	4	...	3	8
	Knacker Yards	1	...	...	...	1
	Gut Scrapers	...	4	...	...	4
	Tripe Boilers	1	2	...	1	4
Various		2	21	4	26	53

TABLE No. 12.

HEALTH VISITORS.

Summary of Work done during the Year 1913.

			District A.	District B.	District C.	District D.	Total.
Visits, Births.		Number of Houses visited	743	685	684	673	2785
		,, ,, Found Clean	698	652	677	650	2677
		,, ,, Found Dirty	45	33	7	23	108
	Children	Breast Fed	646	616	655	637	2554
		Partially Breast Fed	2	2	...	...	4
		Artificially Fed	95	67	29	36	227
	Occupation of Mother.	Home Permanently	486	309	409	435	1639
		Home Temporarily	256	358	272	185	1071
		Home and Work	1	18	3	53	75
Visits, House to House.		Number of Houses visited	546	...	178	63	787
		,, ,, Found Clean	483	...	126	58	667
		,, ,, Found Dirty	63	...	52	5	120
Visits, Infectious Disease.		Number of Houses visited	424	400	410	306	1540
		Measles	187	172	186	165	710
		Whooping Cough	5	4	12	3	24
		Chicken Pox	36	23	27	26	112
		Mumps, Ringworm, Eczema, Sore Head, &c.	196	201	185	112	694
Visits, Measles, Whooping Cough, Deaths.		Number of Houses visited	20	33	25	24	102
		,, ,, Found Clean	16	32	25	22	95
		,, ,, Found Dirty	4	1	...	2	7
Visits, Diarrhoea, Deaths.		Number of Houses visited	11	8	21	25	65
		,, ,, Found Clean	9	8	21	23	61
		,, ,, Found Dirty	2	...	...	2	4
	Children	Breast Fed	3	1	10	5	19
		Partially Breast Fed	1	...	...	1	2
		Artificially Fed	7	7	11	19	44
		Number of Re-visits	1185	1462	1389	917	4953
		,, Tube Bottles in use	39	...	25	46	110
		,, Cards distributed	742	685	684	669	2780
Visits. Re-visits.		Defects in School Children reported by Schools' Medical Officer	310	245	129	205	889
		,, ,,	300	137	373	209	1019
Inspection of Heads.		Number of Schools visited	11	10	25	27	73
		,, Children Inspected in School	1868	2059	3243	3163	10333
		,, Children visited at Home	96	216	278	309	899
		,, Half-days in School	17	19	38	36	110

TABLE No. 13.

Return of Work done by Inspector of Food and Drugs, &c., during the Year 1913.

Food and Drugs, Samples purchased	305
Visits to Cow-sheds and Dairies	262
Visits to Slaughter-houses	4,388
Meat Condemned and Destroyed	103,320 lbs.
Fruit and Vegetables condemned and destroyed...........	1,482 lbs.

TABLE No. 14.

Contagious Diseases (Animals) Act, 1878.

Name of Disease	Situation of Premises	Date of Outbreak	Number of Diseased Animals	Number of Healthy Animals	Slaughtered by Owner	Slaughtered by Order of Board of Agriculture	Number of Visits
Parasitic Mange...	Old Vicarage	Jan. 10	One	30	None	None	7
Parasitic Mange...	Old Vicarage	Aug. 13	One	28	None	None	3
Parasitic Mange ..	Yard off Eldon St.	Aug. 13	One	None	None	None	4
Parasitic Mange...	Yard in Edgar St.	Aug. 16	One	None	None	None	7

TABLE No. 15.

Substances formally purchased and submitted for Analysis during the Year 1913.

Name of Article.	No. of Samples.	Result.
Bread	11	Genuine.
Butter	46	do.
Cheese	2	do.
Coffee	28	do.
Ginger (Ground)	1	do.
Lard	42	do.
Milk	45	do.
Pepper (white)	8	do.
Pepper (cayenne)	1	do.
Rum	1	do.
Sweets	10	do.
Whisky	21	do.
	216	
Coffee	1	Consisted entirely of Chicory. Summoned and fined 10/- and costs.
Lard	1	Contained 2 per cent. of Beef or Mutton Stearin. Vendor cautioned.
Milk	1	Fat 1·19 per cent., other solids 9·12 per cent = 10·31 per cent. total solids, deprived of 60 per cent. of its cream. Vendor cautioned.
Milk	1	Fat 1·80 per cent., other solids 8·96 per cent. = 10·76 per cent. total solids. Vendor summoned and fined 40/- and costs.
Milk	1	Fat 2·37 per cent., other solids 9·36 per cent. = 11·73 per cent. total solids. Deprived of 21 per cent. of its cream. Vendor cautioned.
Milk	1	Fat 2·55 per cent., other solids 7·84 per cent. = 10·39 per cent. total solids, 8 per cent. added water. Vendor summoned, case withdrawn.
Milk	1	Fat 2·87 per cent. Vendor cautioned.
Milk	1	Fat 3·10 per cent., other solids 6·92 per cent, = 10·02 per cent total solids. Vendor cautioned.

TABLE No. 15.—continued.

Substances formally purchased and submitted for analysis during the Year 1913.

Name of Article.	No. of Samples.	Result.
Milk	1	Fat 4·06 per cent., other solids 7·61 per cent., = 11·67 per cent. total solids, 9 per cent. added water. Vendor cautioned.
Milk	1	Non-fatty solids—8·3 per cent. Slightly watered. Vendor cautioned.
Milk	1	Non-fatty solids—8·4 per cent. Slightly watered. Vendor cautioned.
Milk	1	Non-fatty solids—8·4 per cent. Slightly watered. Vendor cautioned.
Milk	1	Non-fatty solids—8·4 per cent. Vendor cautioned.
Pepper (White)	1	Contained, 94 per cent. white pepper, 5 per cent. pepper husks, 1 per cent. sand. Vendor cautioned.
Whisky	1	27·9 degrees under proof, which is 2·9 degrees below the statutory limit. Vendor cautioned.
Whisky	1	27·6 degrees under proof, which is 2·6 degrees below the statutory limit. Vendor cautioned.
Whisky	1	28·1 degrees under proof, which is 3·1 degrees below the statutory limit. Vendor cautioned.
Whisky	1	29·6 degrees under proof, which is 4·6 degrees below the statutory limit. Vendor summoned and ordered to pay costs.
Whisky	1	31·1 degrees under proof, which is 6·1 degrees below the statutory limit. Vendor summoned and fined 10/- and costs.

TABLE No. 16.

Substances informally purchased and submitted for Analysis during the Year 1913.

Name of Article.	No. of Samples.	Result.
Butter	26	Genuine.
Cheese	1	do.
Coffee	10	do.
Cream	4	do.
Lard	13	do.
Milk	3	do.
Pepper (White)	1	do.
Rice	5	do.
	63	
Cream (Preserved)...	1	Fat 33 per cent. ; Borates—calculated as Boracic Acid—0·28 per cent.
Cream (Preserved)...	1	Fat 53 per cent. ; Borates—calculated as Boracic Acid—0·30 per cent. Genuine, as labelled.
Milk	1	Fat 4·17 per cent., other solids 7·88 per cent., = 12·05 per cent. total solids. 6 per cent. added water.
Magnesia	1	Contained 40 per cent. of Carbonate of Magnesia.
Rice	1	Contained 0·23 per cent. Talc.
Rice.......	1	Contained 0·36 per cent. Talc.
Rice........................	1	Contained 0·45 per cent. Talc.

TABLE No. 17.

Return of Port Sanitary Work for the Year 1913.

Steamships Inspected		1205
Sailing Vessels Inspected		39
Re-Inspections		156
Condition of Vessels Inspected	Good	1095
	Defective	149
Defects Remedied:—		
Forecastle Dirty		41
Do. Required painting		16
Do. Deck Leaking		3
Do. Ventilation and Light Defective		24
Foul and Defective Water Closets		60
Foul Water Casks and Tanks		2
Dirty Provision Lockers		74
Do. Bilges		2
Do. Chain Lockers under Forecastle		4

Public Health (Unsound Food) Regulations, 1908.

LIST OF ARTICLES INSPECTED.

Raisins
Currants
Figs
Prunes
Hams
Bacon
Lard
Lard Substitute
Flour
Oat Meal
Peas
Beans
Rice
Barley
Tapioca
Sugar
Potatoes
Nuts
Pig's Feet in Salt

Tinned Goods.

Salmon
Sardines
Beef
Mutton
Tongues
Peaches
Apples
Pears
Pineapple
Apricots
Tomatoes
Plums

Goods destroyed or rejected:—

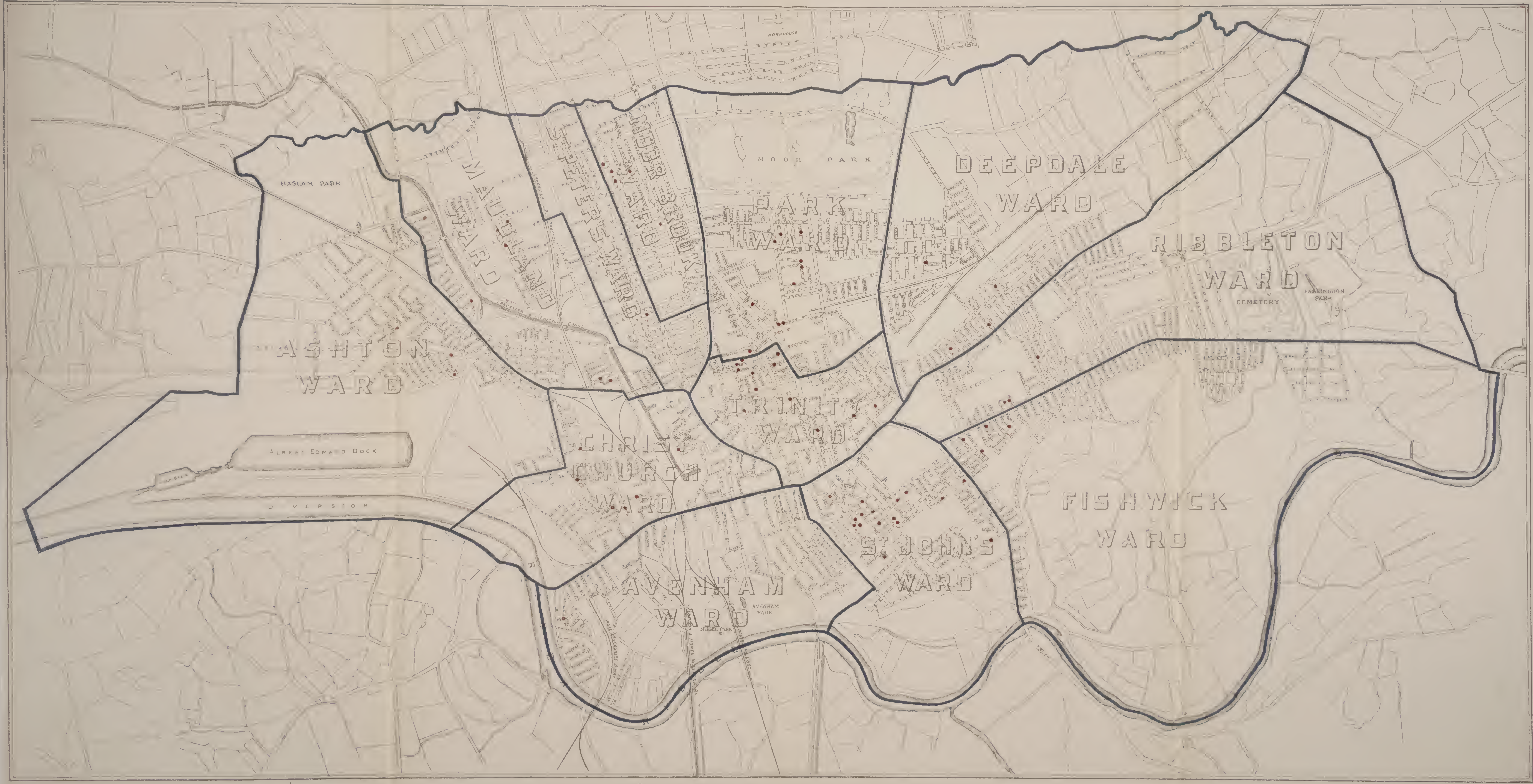
Sugar, 10 tons rejected, sent back for re-manufacture.

Potatoes, 2¼ Tons destroyed.

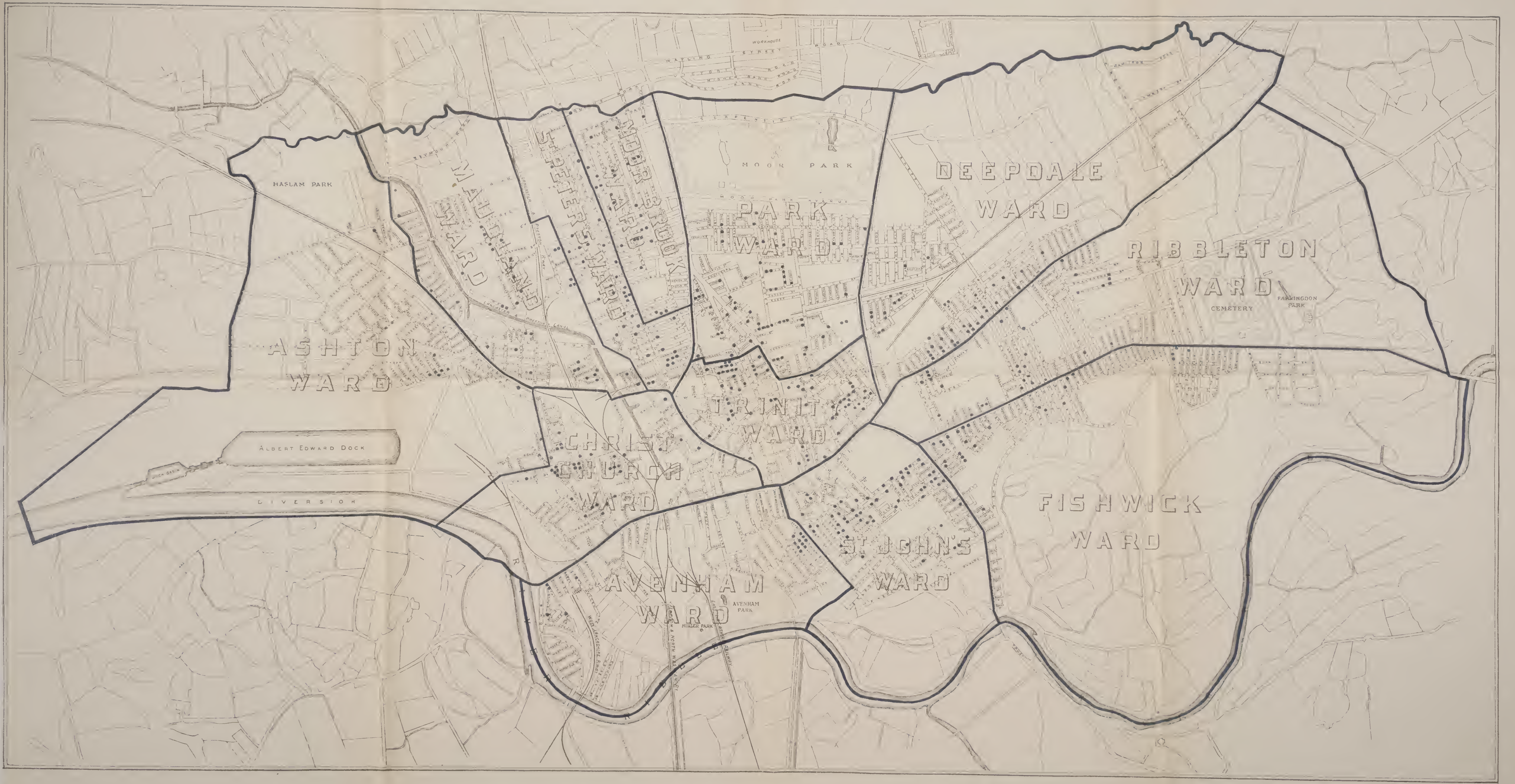
Oatmeal, 1½ Cwts. destroyed.

INFANTILE DIARRHŒA, 1913.

The Red Spots ● indicate Deaths from Diarrhœa under the age of One Year.

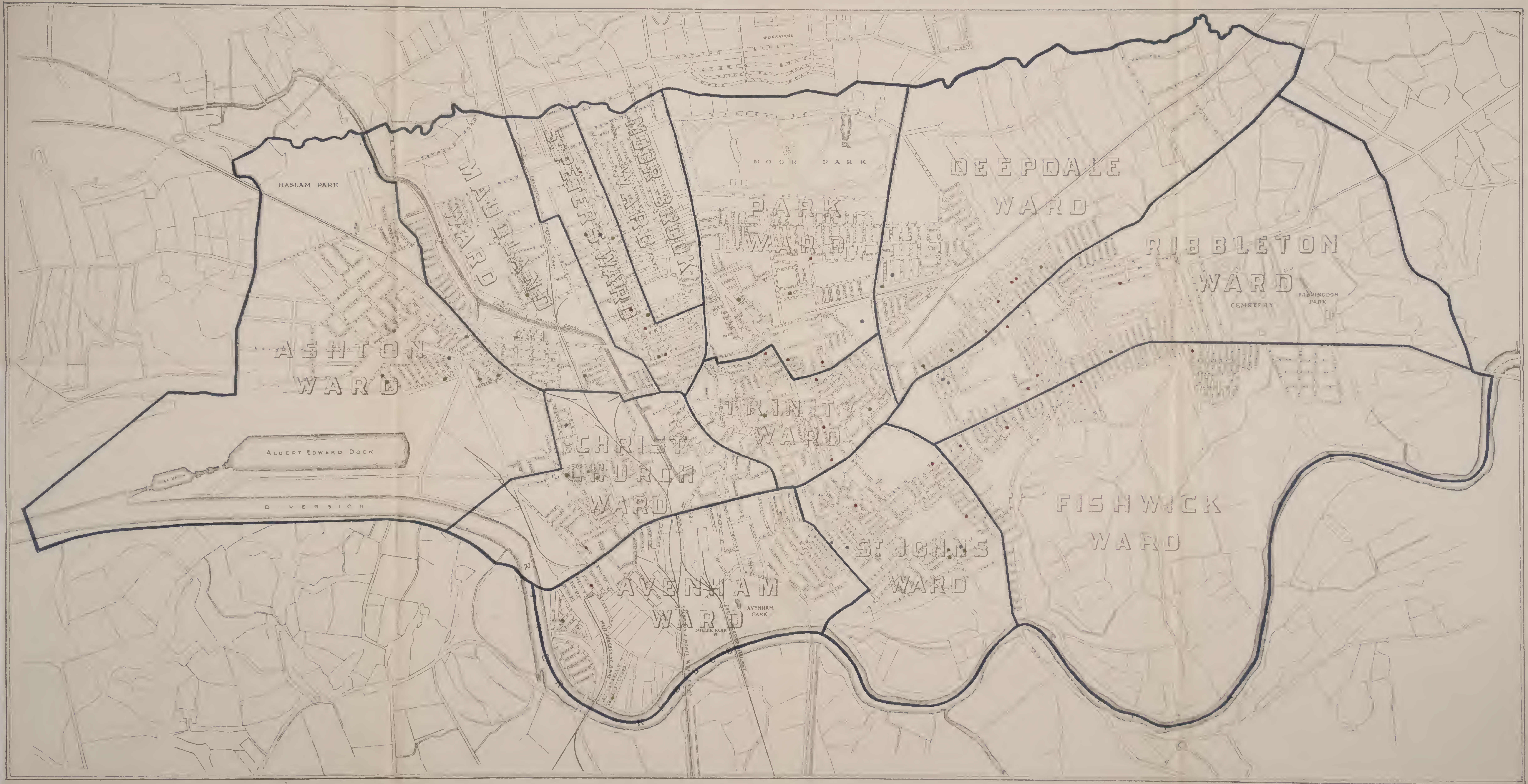


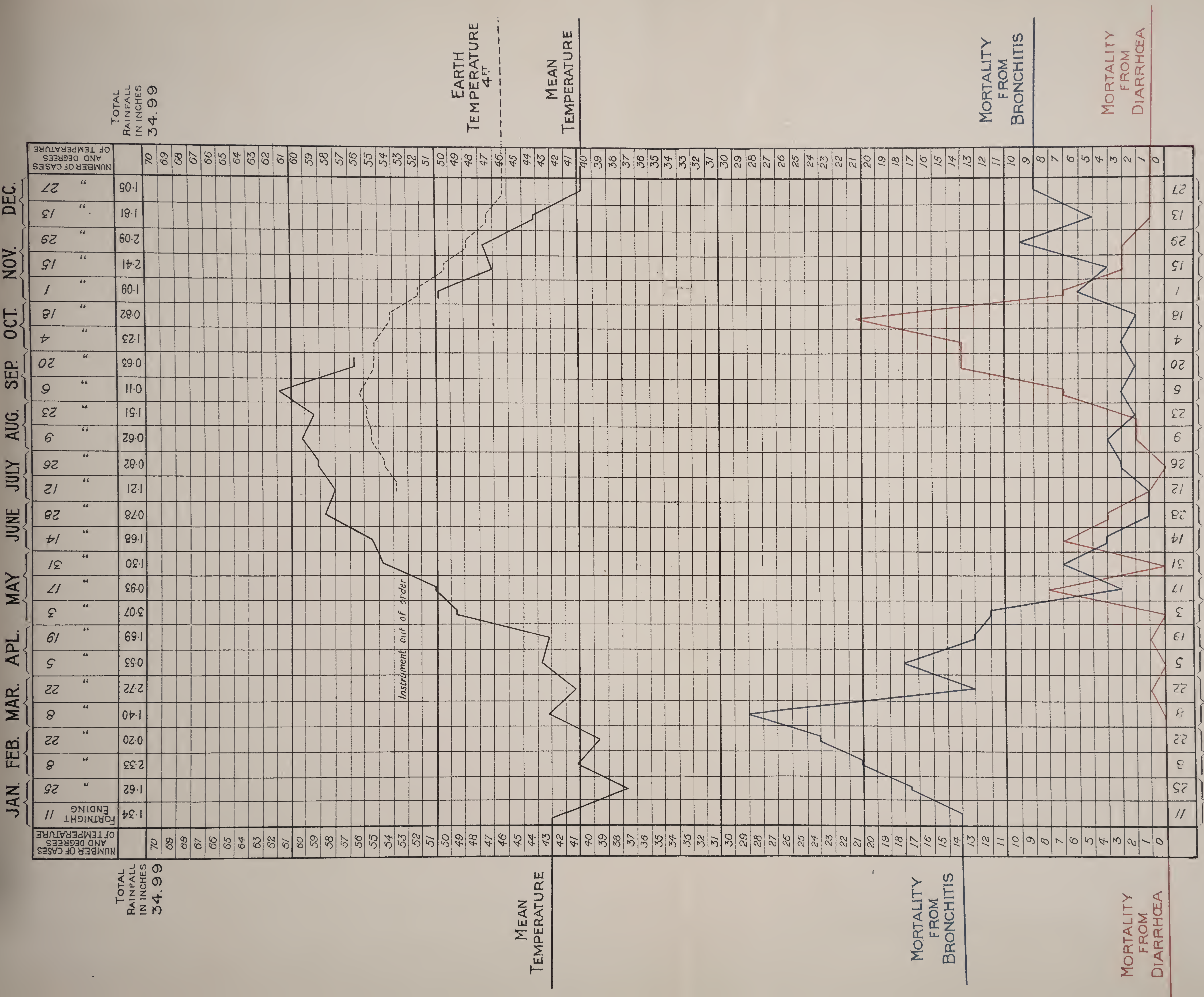
INFANTILE MORTALITY, 1913.



ZYMOTIC DISEASES, 1913.

The Red Spots ● indicate Deaths from Scarlet Fever.
The Blue Spots ● ,, ,, Typhoid Fever.
The Green Spots ● ,, ,, Diphtheria.




Total Rainfall in inches 34.99
Number of cases and degrees of temperature
Fortnight ending
JAN. 11 1·34
25 1·62
FEB. 8 2·33
22 0·20
MAR. 8 1·40
22 2·72
APL. 5 0·53
19 1·69
MAY 3 3·07
17 0·93
31 1·30
JUNE 14 1·68
28 0·78
JULY 12 1·21
26 0·82
AUG. 9 0·62
23 1·51
SEP. 6 0·11
20 0·63
OCT. 4 1·23
18 0·82
NOV. 1 1·09
15 2·41
29 2·09
DEC. 13 1·81
27 1·05
70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0
Earth Temperature 4ft
Mean Temperature
Instrument out of order
Mortality from Bronchitis
Mortality from Diarrhœa